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THE UNIVERSITY OF ALBERTA

# WORKING AT LEISURE: INUIT SUBSISTENCE IN AN ERA OF ANIMAL PROTECTION

BY

BRIAN FLEMING ©

A THESIS
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Brian Fleming
(Students Signature)

1831 - 91 Street
(Permanent Address)

North Battleford
Saskatchewan, S9A 0A6

Date: September 20/89

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled: Working at Leisure: Inuit Subsistence in an Era of Animal Protection, submitted by Brian Fleming in partial fulfillment of the requirements for the degree of Master of Arts in Recreation and Leisure Studies.

..............................
(Supervisor)

....Thomas L. Burton....

..............................

Date: 26/5/89

# ABSTRACT

This study examines the social organization and meaning of time, work and leisure to explain some of the fundamental differences between northern indigenous communities and modern industrial nation states with respect to the perception, use, value and management of fish and wildlife.

In industrial nation states, the meaning and organization of work and leisure tend to be separated into opposite institutions of human actions and values, that are bound by clock time. It is suggested that this dichotomy between work and leisure helps to explain the recent emergence of an animal protection movement, which values and advocates the non-consumptive use of wildlife in opposition to the way work is viewed and practiced within advanced industrial nation states. In industrial society people value wildlife primarily for leisure, and they also enjoy a much higher social and economic standing compared to northern indigenous populations.

Amongst northern Natives, despite the recent changes that have occurred since encapsulated within nation states, the value and meaning of wildlife harvesting is that it is for primarily subsistence purposes. As such, although work and leisure is an ubiquitous part of the subsistence lifestyle, they are not separated into a dichotomy of human actions and values. A further distinction is that although the clock has become an important mode of reckoning time since northern Natives have lived in permanent settlements, time continues to be reckoned according to the ecological processes and phases of nature, that are part of the environment a hunting people uses and occupies. In this regard, the study describes how wild foods contribute to the human diet of an Inuit community, by examining the way they are produced and consumed as part of the seasonal round of subsistence activities.

In view of the current conflicts between the northern indigenous users of wildlife and the animal protection movement, it is argued that the movement represents the latest stage of a colonial and ethnocentric attitude towards the north. A primary reason for this conclusion is that animal protection advocates view and explain northern indigenous wildlife harvesting according to the work and leisure dichotomy in industrial society. The study concludes by suggesting that the northern human ecological situation will only begin to be understood when we cease to take industrial biases about time, work and leisure as axiomatic for northern Native communities.

# ACKNOWLEDGEMENTS

Without the friendship, patience and interest amongst the Belcher Island Inuit, this research would not have been possible. There are many members of this community I wish to acknowledge and thank. However, I have refrained from thanking each one by name, so that their identity is kept anonymous.

While living in the community, I became personally involved with some of these people. Sometimes our experiences led into very personal, serious discussions, without losing sight of laughter. There are other Inuit who gave a considerable amount of help and encouragement in teaching me their language, which I do not completely understand or speak, while other members of the community taught me certain skills, and helped me make, or provided, certain tools and clothing which are essential to the hunting way of life. Again, there are other people who shared their knowledge of the world in which they live, especially in terms of what they know and do as they travel throughout the lands and waters they occupy and use.

I also wish to thank Miriam McDonald, who was with me during all aspects of the study. We lived and worked together while in the settlement, and we lived at camp with different Inuit families, although we were not always together in the same camp. Without all the help, patience and advice the study has received from Miriam, it may never have been completed. There are several other friends and people who also helped in countless ways, but they are too numerous to name.

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# CHAPTER I

# INTRODUCTION

For over a decade now the use and management of wildlife has been characterized by considerable national and international conflict, particularly concerning the use of marine mammals (Aron, 1988; Herscovici,1985). One object of this study is to demonstrate that a better knowledge of the social meaning and organization of time, work, and leisure would be helpful for everyone concerned about the use, management and sustainable development of the living environment.

As such, the purpose of this study is to describe and examine, from a human ecological perspective, how different systems of time, work and leisure are conceived and contribute to the development of views and values of the environment in general; and to the use, conservation, and management of wildlife in particular. In order to examine the relationships between different systems of time, work, and leisure on the one hand, and how they are interrelated to environmental use and values on the other, this study will contrast and compare how wildlife is regarded and used, as an occurrence and process in the day to day lifestyles, between advanced nation states and northern indigenous populations. The study is based on a literature review, and twenty months of ethnographic field research while living in an Inuit community over a three year period.

It is well known that in advanced western industrial nation states the relationship between humans and wildlife is experienced and conceived according to a system in which work and leisure are organized into two separate institutions (Cheek and Burch, 1976:12-33). That is to say, amongst other things, the organization of work and leisure is often treated and perceived as isolated, opposing compartments of human action and values. Although considerable variation undoubtedly exists with respect to how work and leisure are conceived and actually experienced by different groups within industrial society based on gender, age, class, and so on (Shaw, 1985), at the societal level the image of leisure tends to be defined in opposition to work, is subordinate to work, and is often treated as reward for, or relaxation from work. In the advanced industrial state, leisure has become widely regarded as the exact "counter attack to the office machine", and it occurs in the realm of volunteerism and freedom, while work takes place within the realm of determinism and obligation (Rojek, 1988:22).

A further way in which work and leisure is organized into two separate institutions in advanced industrial states stems from the manner in which they are reckoned and patterned according to the clock. In the day-to-day lifestyle of the nation state, where the majority of the population is concentrated in large urban centers and work within a wage economy, there is little need to detail how work and leisure in peoples lifestyles have become segregated and rigidly scheduled according to clock time. According to Grossin (1986:93):

> In modern societies it is impossible for the individual to escape from the dominance of industrial time... It invades our daily life. A watch has become an indispensable tool of reference, material proof of a bond, or even a symbol of alienation. We are entrapped by school, work, family, and social time, all rigidly compartmentalized and often enforced collectively.

For the sake of clarity, in the social sciences a distinction is often made with respect to the use and meaning of the terms leisure and recreation. The distinction between these terms depends upon the specific criteria a researcher deems relevant to the particular problem and issue under investigation. In general, however, leisure is often used to refer to a perceived sense of unobligated or free time, while recreation refers to the kinds of activities people choose to participate during their leisure time. Recreation activities frequently include, but are not limited to, the delivery of professional programs and services provided by the state, or by the private sector (e.g. films, sports clubs). In this context recreation is sometimes seen as an industry. For the purposes of this study, however, the differences between leisure and recreation are considered marginal, so they will be used synonymously.

Historically, there appears to be widespread consensus among a diversity of disciplines that suggests there is no separation between work and leisure amongst hunting and gathering peoples. In hunting and gathering societies, it appears that time is not viewed as linear but cyclical, and that in terms of the quest for food and procurement of other material requirements both work and leisure are part of the same process (Kemp and Jacobs, 1886). According to Wax (1962), life has a rhythm or series of cycles, as opposed to a progression. Others, such as Cottle and Kleinberg (1974:166-167), suggest that in traditional foraging societies time is reckoned through welding recurrent natural and social phenomena, and is expressed as a social experience rather than as points of division on a linear continuum. In general, Stanley

Diamond has contrasted some of these differences between traditional foragers and industrial society by noting:

> A civil society, with its tremendous fragmentation of labour, has institutionalized every major activity into a separate sphere as a separate spoke of the wheel, so to speak. The church is here, the work is here, the family is here, art is here - this is what contemporary capitalism, and I'm assuming this is what all industrial civilizations has accomplished - it has simply fragmented human consciousness and fragmented human activities. Primitive societies are the mirror image; they are the opposite. All this is integrated (in Cayley, 1984:13).

In regard to the Inuit, the meaning of time and how it is related to the organization of work and leisure appears to have slipped through the interests of most anthropologists, despite the fact that these northern indigenous groups have become one of the most written about people in the world (Freeman, 1981). Based on observations amongst the St. Lawrence Island Eskimo of Alaska, Hughes (1961) suggests that 'leisure time' is a concept with relatively little positive meaning in its own right. He also adds (1961:92):

> the cultural focus of daily activity is not on time as a hollow shell which is to be filled with completed tasks or accomplished relaxation... Rather, the focus is on the tasks themselves which must be done.

A similar position is taken by Kemp and Jacobs (1986), who argue that in Inuit society emphasis is placed more on the psychological outlook rather than on how a particular person uses his or her time. In addition, Gagne (1968:32) who has analyzed the meaning of time within the language of the Inuit suggests that:

> there is no Eskimo concept for time or its myriad of subdivisions, as indicated by such expressions as to save time, to kill time, to gain time, and so on. These kinds of words

> are lacking in Inuit for the simple reason that time as we know it does not have the same relevance. Further examples of this come from a careful analysis of the tense system where the present, immediate past, and immediate future are by far the most frequently used. The distant future is not used very frequently, and unlike our culture, it is not future oriented. Planning beyond the immediate future is not common and in general, there is a lack of elaboration of time concepts.

Although several different studies and reports exist that detail how work and leisure have become compartmentalized, it is sufficient to refer to Roberts (1974:31) who states:

> the distinctive feature of leisure in modern industrial society is the extent to which it has become a differentiated institution. The explanation is that the existence of leisure as a separate part of peoples' lives, catered for by its own social institutions, was virtually unknown before the twentieth century. Leisure as it is experienced today is really a product of industrial society. Industrialization has created not only the spare time and surplus income that is available for discretionary spending: it has also instituted a rhythm of life in which set hours are devoted to work, after which mans time is free.

Consequently, in the nation states, where current lifestyles tend to be rigidly organized around clock time and specialized occupations, wildlife experiences of all types and wildlife hunting in particular, are primarily regarded and valued as a leisure or recreation activity. For example, in the Canadian national situation, recent surveys estimate that:

1) ten percent of the population recreationally hunts;

2) twenty percent of the population made specialized outings to observe wildlife; and

3) five out of six citizens directly or indirectly participated in a wildlife-related activity.[1]

Thus, despite that some commercial use of marine mammals like whales and seals has occurred since the 12th century (Hertz and Kapel, 1986; Mitchell, 1975), and with the exception of the trapping and trade of fur bearers and certain seasonal off-shore or in-shore fisheries, the commercial use and value of fish and wildlife is minor compared to the predominate, yet diverse, complex, and conflicting ways in which wildlife are used and valued for leisure and recreation purposes (e.g., Filion, Jacquemot, and Reid, 1985). As a result, in advanced industrial nation states the conventional system of wildlife use is approached by separating commercial and leisure interests into two distinct institutions. Similarly, a sharp distinction is also placed between the users and managers of wildlife, to the extent that the managers can be identified as a professional occupational group.

The ways in which wildlife are used and valued for leisure or recreational purposes within industrial nation states involve a complex, diverse range of experiences and activities which occur in different contexts. Indeed, over the last few decades a tremendous amount of research has been conducted on different types of wildlife recreation activities (Crandall,1980; Hendee et al, 1968). In this regard, a fundamental goal of the nation state, through wildlife management and planning agencies, is to identify the different "user, and non-user or anti-user groups, by defining and understanding the clientele of contemporary wildlife management" (Kellert and Brown, 1985: 269). Similarly, the nation state manages wildlife, and wildlife habitat, by attempting to accommodate these different user or non-user groups through detailed planning and management to ensure a full range of outdoor recreation opportunities (Driver and Brown, 1978).

---

[1]. See Peter Usher (1983:17-18), and Filion, Games, Durharme, Pepper, Reid, Boxall and Teillet (1983).

However, due to the complex ways outdoor recreation and wilderness activities have become specialized (Deval and Harry, 1981), they often come into conflict with one another in relation to, inter alia, the manner in which recreational activity preferences and values interact with various social and economic variables in the formation of differing views regarding wildlife use (Bos, Brison and Eagles, 1977), resource preservation, and development (Jackson, 1987; 1986; Dunlap and Heffernan, 1975).

In regard to hunting and fishing, as direct forms of participation in wildlife recreation activities, they are a sport. They occur when a person is not normally at work within a wage and market economy. Although the products of recreational hunting or fishing may be highly valued as a status trophy, or as foodstuffs for personal consumption, it appears that it is also the experience itself that is valued.

Likewise, in nonconsumptive wildlife recreation activities, it is not necessarily the wildlife themselves which are valued, but as Usher (1983:4) suggests, it is a product (e.g., stories and photographs), an experience, or a feeling or consciousness about the world around us, and our place in it that is valued. These latter types of wildlife recreation experiences may or may not directly occur in a natural setting due to the lack of desire, or opportunity to directly observe and participate. In these situations, however, wildlife may be valued by just viewing or reading about it through the mass media, or by taking pleasure (and value) in knowing that wildlife is just there and exists as a form of contemplation. In other words, just knowing wildlife exists, apart from any direct human use and experience, is a contemplative leisure activity that is usually separate in time and space from work during the day-to-day lifestyle of industrial people.

Over the last few decades, these wildlife recreation activities that are perceived and experienced according to their non-consumptive, appreciative, and existence values, appear to be gaining increased interest within mainstream industrial society. For example, wildlife observation, study, literature, art, and photography have become popular leisure or non-work activities; and have become major markets for nonconsumptive renewable resource industries. This trend towards the nonconsumptive, appreciative use of wildlife has closely evolved in association with an animal protection philosophy of wildlife management, which is rationalized as a universal moral and ethical call for a new relationship between humans and the environment, in light of what has been referred to as the "global predicament" or "ecological crises" (Orr and Soroos,1979). In this regard, participation in all forms of outdoor recreation activities, and in particular participation in nonconsumptive wildlife experiences have become closely related and intermingled within the overall goals of the environmental movement. As Jackson (1987) suggests, members who participate in the nonconsumptive use of wildlife tend to adopt a set of values that they believe are consistent with a conserver rather than a consumer society.

The environmental movement, as it has emerged within western industrial nation states, is extremely institutionalized, and fragmented, according to the diverse number and range of issue oriented groups that it represents (Sills, 1975). Within the modern industrial state, over the last few decades, an animal rights or animal protection wing within this movement has emerged; marked by the proliferation of a diverse number and network of local, national, and international nongovernmental organizations (NGO's). In Canada, these voluntary associations are drawn from urban populations. Although these diverse groups are by no means homogeneous, there tends to be a consensus that both wildlife and domesticated animals have a right to exist, apart from human values and use. As a result, humans are morally obligated to not interfere or use animals, based on various philosophical schools of thought such as moral vegetarianism, enlightened utilitarianism, animal interests, and reverence for life. In recent years, all these philosophies have received increased attention, and there has been a virtual explosion of academic and popular literature about these subjects (see,e.g. Magel and Regan,1977).

Although there is no consensus on the meaning of animal rights, what the movement appears to seek is the elimination of most forms of consumptive use of animals in favour of a more nonconsumptive, appreciative set of relations toward wildlife. Anything less is considered as a form of domination over nature and wildlife by man. Since the 1970's, the protection of wildlife has become symbolized within the environmental movement through the "Save the Whales and Save the Seals" campaigns, and it has been suggested that the goal is to encourage the nonconsumptive optimum utilization of whales and other non-human species (Barstow, 1986).

One of the outcomes of the animal protection movement is that northern indigenous communities, which continue to depend directly on harvesting the wildlife from the environment that sustains them within the particular region each group occupies and uses, have become increasingly deprived of their livelihood and way of life. For these indigenous communities, the use of wildlife tends to be organized within a system in which a distinction between work and leisure is not as marked. Rather, as a considerable literature which now exists substantiates, these indigenous systems of wildlife use tend to be based on a cosmology, set of beliefs and knowledge, and social and ethical practices that contribute to human sustenance and sustainable use of the wildlife and environment (Andrews, 1988).

In contrast, since the animal protection movement occurs as a result of the separation between work and leisure, this may mean that the shift towards wildlife protection policies may be motivated by, and reflect how these groups seek to further their leisure interests for wildlife, and less about the actual human ecological condition and moral welfare of the animals themselves.

In this context, the animal protection movement appears as a characteristic of the modern industrial state. It represents not necessarily just a moral concern for animals, but more fundamentally, how wildlife have become institutionalized and socially organized as a leisure phenomena in opposition to the values of work, or to modern industrial civilization in general. As a result, the ways in which the animal protection movement militates against northern indigenous aspirations and way of life implies that groups within nation states continue to evaluate and try to shape the world according to the interests of mainstream industrial society. Yet, from the indigenous perspective, they themselves describe this attitude and process of the encroaching societies as:

> one of missionizing and cultural imperialism, by a tireless, ever continuing effort to shape the entire world according to the image of western industrial culture (Lynge, 1986:83).

# CHAPTER II

## FIELD WORK AND METHODS

In the early summer of 1985 I travelled by plane to the Belcher Islands and started work on this study. This small archipelago is located in the south eastern region of Hudson Bay (Figure 1). Aside from the indigenous groups who travel over the sea ice or open water between the Belcher Islands and the other indigenous communities located along the east coast of Hudson Bay and James Bay, access to the Belcher Islands is only available by air transportation, through Northern Quebec. The initial field work occurred over a two month period, followed by eighteen months of further field work, from January, 1986 to August, 1987.

Upon arrival at the Belcher Islands, I was alone and knew no one in the community. Prior to arriving, I corresponded in writing with the Hamlet Council, to request permission and make preliminary plans for this study. At that time, there were no set research plans, and the intent was to live in the community as a way to familiarize myself with the language, and to find out what kind of specific research possibilities and limitations needed to be respected.

Through assistance from the Hamlet Council, arrangements were made in advance that enabled me to live with an Inuit family for the first two months. While living with this large family there was not enough room in the house so they provided me with a bed in their small carving tent. The tent, made of canvas and wood, was located immediately adjacent to the house. In many respects this living arrangement was

FIGURE NOT INCLUDED DUE TO COPYWRITE RESTRICTIONS

FIGURE 1: LOCATION OF THE BELCHER ISLANDS, SOUTH EAST HUDSON BAY, N.W.T. (Schwartz, 1976)

ideal because I could move in and out of the house as necessary, and yet it provided a sense of privacy to study the language and make notes. On more than one occasion the tent also became a form of psychological shelter, as relief from the awkward situations that sometimes arose between myself and the family I lived with, particularly since I had no prior knowledge of, or experience in Inuktitut, which is the first language spoken in the household, and is the name of the language spoken by the Inuit of northern Canada. Although the children in this family have learned english at school, it was only heard spoken in the household on a few occasions.

While living with this family, approximately half the time was spent in the settlement while the remainder was spent at camp, hunting, fishing, and gathering soapstone. While in the community, I went for walks in, and around, the area of the settlement, and gradually became acquainted with some of the Inuit who I would visit.

From the beginning of the field work I was confronted with a number of problems that required a change in approach to the research. First, I originally planned to place a great deal of emphasis on learning to understand and speak the community language. But I found myself shy, and poorly prepared for learning a second language. Consequently, although I was able to develop a small vocabulary and learned to speak in simple terms, this aspect of the research often became a frustrating and difficult experience. Although I continually tried to learn the language throughout the entire field period, I was not able to remember all that the Inuit volunteered to teach or explain to me.

Second, I was overwhelmed by the unfamiliarity and pace of events I frequently found myself participating in during the field period. For example, on the third day after first arriving to the settlement, I "unknowingly" became part of a hunting and fishing camp, located in the Sleeper Islands (Figure 2). Amongst the Belcher Island Inuit (or "Islanders") this group of islands is known as qumutuq. Only moments before we were about to finish loading the boat and depart, did I learn it would involve overnight camping. At the time, I was under the impression we were only going away for the day. So while everybody waited, some of the children helped me hastily pack a bag and gather some blankets. As it turned out, the trip occurred over twelve days, and I became immersed within a group of people who I could not communicate with in the working language, nor was I familiar with the kinds and ways in which wild foods were prepared and eaten at every meal to form the diet. I approached these wild foods cautiously, and in general felt uncertain about my presence within the group. This was not the only time an unexpected situation occurred, although after this early experience I came to accept these unfamiliar events and settings more readily as the field work unfolded. Finally, due to the unpredictable nature and frequency with which these types of events seemed to occur, it became increasingly difficult to conceive of the field research in terms of a particular set of research methods.

For the first thirteen months of the second field period I was employed by the Hamlet Council as a community-based economic planner. While working in that position it was necessary to become familiar with the socio-economic nature of the community, and it provided an active, or participatory, opportunity to develop an awareness for the kinds of administrative problems and difficulties that a small isolated indigenous community like the Belcher Islands Inuit have to deal with on a day to day basis; particularly, with respect to the whole notion and practice of "planning", as it has evolved in conjunction with the ways in which this formally wholly subsistence hunting community has become encapsulated within nation states. Harvey Feit (1982) has discussed some of the important aspects of this encapsulation process by noting how all northern indigenous populations have become transformed:

> from being wholly autonomous societies in essentially complete control of their own daily lives, and in effective control of the lands and resources which they utilized, to become societies enmeshed in complex relationships to the wider world, and in particular to the national states and international economies. Some of these linkages have been welcomed, and indeed actively sought, others have been unanticipated or imposed (Feit, 1988:72)

In the Belcher Islands, the nature of these linkages, not to mention their advantages, disadvantages and problems, are far too numerous and complex to describe in detail here, although some will be mentioned in the discourse of this study, as they apply to the use and management of wildlife. As a community planner, I attended meetings and conferences in Iqaluit (Frobisher Bay, N.W.T.). These conferences were primarily related to aspects of tourism and economic development in the eastern Arctic. They provided an opportunity to develop a first hand appreciation for the day-to-day processes associated with geo-political linkages between the Belcher Islands and the outside world; for example, as one community within the Baffin Region of the Northwest Territories. With the exception of one occasion, participation in these meetings was usually in the company of Inuit from the community. During the same period of field research, I followed many Inuit while they travelled, camped, hunted and fished throughout the archipelago, whenever the opportunity was available.

For the last five months of the field work I was not employed. Consequently, I was more free to participate directly in the hunting, fishing, and carving lifestyle, without having to concern myself with formal responsibilities as a community planner. During this period, I continued to follow the Inuit on hunting and fishing trips. The duration of these trips varied considerably. Sometimes they were single or part day trips in and out of the settlement to gather seafood, check fish nets, or hunt seals at breathing holes. On other occasions these trips involved living in seasonal camps for up to periods of one month. Over the twenty months of field work, these hunting and camping trips occurred in all kinds of circumstances and seasons during the annual cycle, involving many hundreds of kilometers of travel throughout the archipelago.

There are several reasons why this study was conducted at the Belcher Islands. A primary reason is simply due to the logistical and economic factors that need to be taken into consideration to conduct long-term ethnographic field work. In this case, I was fortunate to have been asked by the Hamlet Council to serve as a community economic planner which provided an indirect source of financing to conduct this research. A second reason relates to the past research that has already been conducted in the Belcher Islands. In this sense, Flaherty (1918), Desgoffe (1955), Guemple (1971, 1965), Schwartz (1976), and

Freeman (1982, 1967, 1960) all provide a rich source of information regarding the historical, sociological and ecological aspects of Inuit land use and occupancy in the Belcher Islands.

The field work is difficult to categorize and separate into distinct methods. For example, while visiting and trying to learn Inuktitut these events would often lead into extended, detailed conversations about the past and present life in the community. On the other hand, certain observations and insights were learned merely by being present and taking an interest in the particular event and social situation that emerged. As a result, it would be misleading to state what precisely was learned through systematic inquiry or method, as opposed to what was learned by chance, from simply being in a particular place and taking an interest in understanding the meaning of the event. Throughout the entire field work, the only time notes were recorded in the presence of the Inuit was when learning Inuktitut, and even on these occasions notes were not always recorded. Nevertheless, an extensive record of the field work was maintained in a journal and some information was recorded on topographical maps.

In the early stages of the field work my role as participant/observer was primarily passive. In the beginning, this passive role seemed appropriate for I was content to watch and help out as needed by doing simple tasks when setting up camp, launching boats, and so on. Yet, as the field work progressed, it became necessary to adopt a more active participatory role, as a way to facilitate honest and meaningful social discourse to acquire a fuller understanding of the knowledge, beliefs, attitudes and other underlying reasons that give meaning to the use of wildlife. In other words, although asking questions and talking about hunting with the Inuit imparted a certain amount of information, this information often only began to take on relevance and meaning through actually trying to learn some of the hunting and living skills associated with the lifestyle. This more active participatory role was enhanced because I unexpectedly received a used rifle as a gift, and gradually learned how to make, and acquire some of the clothing and equipment required to travel, hunt, and live in the archipelago. While assuming this role, learning even simple but essential tasks associated with the lifestyle often became frustrating experiences, particularly since I had never hunted prior to the field research.

Over the last few years participant observation and other ethnographic research methods have received considerable interest and attention in the social sciences (Wolcott, 1985; Owens, 1982). This interest stems, in part, from a recognition that although quantitative research methods are a valuable way to describe and measure the different kinds of activities groups participate in, they do not provide, or reveal, the meaning of the activities to the people themselves. Thus, participant observation and ethnographic research attempts to go beyond "numbers", to find out the underlying reasons that give meaning to what people do. In this sense, an emphasis is placed on the actual behaviour, and the way it is personally and socially expressed, rather than on the analysis of the peoples behaviour and statements per se.

There is, however, certain limitations of any research, based on the extent to which the findings are reliable and valid. These kind of concerns are particularly relevant to ethnographic research, because there is no standard procedure for another researcher to follow in order to replicate, confirm and assess the reliability of the results. In short, because ethnographic research relies on personal observations and experiences with the people and setting they wish to learn about, the results are not necessarily reliable because a different researcher may have quite different experiences while studying the same group of people and setting. In respect of this limitation, it is essential for an ethnographer to provide as much detail, and to describe the circumstances and context that led to certain observations, so that other people and researchers can critically assess the reliability of the results relative to how the situation is defined.

A further problem in using participant observation research methods is that there is a tendency to treat the community as a homogeneous unit. Unfortunately, this often has the danger of unwittingly disregarding how even the smallest communities are divided on many issues. When this happens, it may lead to over representation of some interests, or under-representation of others. Yet, even if this latter problem is not apparent, the participant observer is often unlikely to provide a convincing argument that he or she has maintained a neutral impartial stance (Matthews, 1976:5). If the researcher can be shown to have a vested interest in the research or phenomena they study, then these interests may be sufficient reason to treat the recommendations or policy implications of the particular field research with suspicion, as well as to discredit the reliability and validity of the research findings. In order to overcome these problems, many researchers incorporate some form of representative sampling to ensure coverage of the entire range of human behaviors, values, and views that define a particular human population. However, even here, different researchers may have different interpretations of the same set of quantified data, depending upon such things as, for example, career aspirations, professional status, and previous experience (see, for example, Freeman and Hackman, 1975).

These kinds of problems seem particularly germane to the ways in which research is used and occurs in relation to the conflicts that have emerged between animal rights advocates and the indigenous users of wildlife. For example, public debates tend to be highly emotional, and the arguments pertaining to the trapping and trade of wildlife tend to be structured to demonstrate to the public at large, and to policy and decision-makers in particular, that each group perceives the natural environment and wildlife properly, while simultaneously trying to discredit the views of the other group. Gentile (1987) has observed this aspect of the debate. He emphasizes that the very structure of the debate seems to serve as an incentive to make the opposing positions appear strongly polarized, despite the fact that both indigenous and animal rights groups consider themselves as conservation-oriented. That is, both groups don't want to see wildlife populations become extinct. A further complication is that both indigenous hunters and animal protection groups are often critical of the ways in which the nation state manages wildlife, although animal protection advocates tend to see indigenous hunting and the professional, scientific approach to wildlife management and research as a system in which wildlife are treated as renewable resources to serve human purposes. This system, is perceived as a system of use and management that manipulates wildlife populations by creating an artificial surplus of animals so that they can be killed according to the maximum sustainable yield (Baker, 1985).

The tendency to dichotomize animal rights views and those of the indigenous users of wildlife into contrasting polarized positions seemed to create trouble and yet motivate the field research. Rather than just focussing on how animal rights advocates and the northern indigenous users of wildlife have different views and values of wildlife, I became interested in how these perceptions and values have emerged and are related within a particular social context. In other words, the moral context of wildlife use is not just an emotional or rational state of mind, but is intimately interrelated with the ways in which these views occur and are given meaning within a particular lifestyle, set of social experiences, and cultural knowledge. As a result, this study has become concerned with explaining the values and beliefs of wildlife use relative to how they have evolved within two different social systems according to the meaning and organization of time, work and leisure.

Finally, an important assumption that guided the field work and analysis of the information is that a group of people such as the Belcher Island Inuit, who historically evolved and continue to depend directly upon the environment which sustains the wildlife, fish, and plants within the region they use and occupy - is likely trying to manage the wildlife and living environment in the best possible way, for their own self-interest. In a personal context, this assumption was regarded as being important because it provided a way to focus and analyze field observations, while simultaneously serving as a means to keep personal biases in view.

By focussing on ways in which the Belcher Island Inuit are trying to manage wildlife within their particular region, an emphasis was placed on learning about wildlife use from the Inuit themselves, as opposed to merely treating the members of this community as subjects of study. By becoming involved with the community, the key question under examination, was what kind of organizational strategies and processes occur in the hunting way of life that reflect how human-wildlife relations are viewed, negotiated, and socially sanctioned in the community.

## FOCUS OF THE RESEARCH

This study is best described as problem-oriented, human ecological ethnographic research. It is ethnographic because it describes and examines some of the ways in which wildlife are viewed and used in the lifestyle of an Inuit subsistence community. It is problem-oriented because it examines the implications of how the Inuit view and use wildlife in relation to some of the questions and perceptions about northern indigenous wildlife harvesting that are being raised by the animal protection movement in particular, and in respect to the management of common property resources in general.

As the fieldwork unfolded, however, I changed my orientation. First, although the seal boycott and the anti-trapping campaign currently led by the animal rights movement is viewed as a threat, and has created unquestionable economic and social disruptions amongst the Belcher Island Inuit, I started to realize that the issues involved, from the Inuit perspective, are more than questions pertaining to an economic system of inputs and outputs. As I became familiar with the manner in which wildlife is used, experienced and regarded by the people of the Belcher Islands, I started to learn and gain insights into how wildlife is conceived of, and treated according to a non-western outlook and orientation towards life. At the same time, as various dimensions and aspects of this outlook and orientation towards life became at least partially understood, I started to realize how indigenous use of wildlife often tend to be placed within certain ideas and assumptions which are expressed as if they are indisputable, scientifically proven facts.

During the early stages of the field work it was anticipated that an emphasis would be placed on identifying and analyzing some of the changes that were occurring in the hunting and trapping lifestyle. This particular orientation was based, in part, on the conviction that an assessment should be made of the economic impacts, and the social responses to those impacts, that occurred in the community as a result of the ban on seal fur imports by the European Economic Community in 1982. Thus, the original focus was on questions pertaining to changes and adaptations occurring in the Belcher Inuit lifestyle in response to the loss of seal fur markets. This approach to the field research seemed straightforward, relatively manageable, and a neutral way to study the problem in recognition of the political and idiosyncratic factors involved with any research process. It also seemed socially relevant in light of the:

1. social problems and lack of alternative economic opportunities perceived to exist in northern indigenous communities; and
2. the serious socio-economic consequences that have occurred in other Inuit communities due to the loss of seal fur markets (e.g., Wenzel, 1985, 1978; Foote, 1967).

As the field work unfolded, however, it appeared that although the economic implications and social consequences of the seal boycott are certainly an important concern and threat to the Belcher Islands Inuit, the issues involved in the use of wildlife are far more than purely an economic system, or another system that can be effectively measured merely by a quantitative system of inputs and outputs. As I became more familiar and actively involved in the hunting way of life, it became increasingly evident how indigenous use of fish and wildlife tend to be seen and evaluated in relation to the economic and leisure interests of populations located in large industrial metropolitan centers. As a result, this study has become less concerned with the impacts of the animal rights movement on a subsistence Inuit community, and more concerned with the ways in which the animal rights movement situates and evaluates northern indigenous use of wildlife within the economic and leisure interests of the dominant society. Thus, this research is oriented towards how certain assumptions about indigenous wildlife use tend to be more representative of a western industrial world view, as opposed to how wildlife use occurs as an active process in the contemporary Inuit hunting lifestyle, as I have learned about that lifestyle from the Inuit who use and occupy the lands and waters surrounding the Belcher Islands.

As I became more acquainted with how the Inuit view and use wildlife through talking and listening about these matters while visiting and directly participating in the hunting lifestyle, it became evident that many of the questions and issues being raised by the animal protection movement reflect how attitudes towards wildlife use and management stem from an ideology and organization of time work and leisure in an industrial context, as opposed to a systemic or ecological representation of human-animal relationships characteristic of indigenous use, values, and attitudes towards fish and wildlife. In this sense, what the animal protection movement has come to mean relates more to the continuation of a colonial attitude towards the north and its indigenous occupants, rather than an alternative ecological approach to human-environmental relations and adaptation.

Through this shift in orientation, this study has come to focus on three interrelated themes.

First, the study focuses on how wildlife use and management are valued and conceived according to the social organization and meaning of time, work and leisure, by describing and examining the way wildlife values and use are socially expressed and practiced under the emergence of an animal protection movement, as a characteristic of the modern industrial state.

Second, in light of the tendency to assume that wildlife use and values amongst the Inuit, or other northern indigenous subsistence community are homogeneous to western industrial culture, the study focuses on some of the problems that are involved when trying to stereotype the Inuit use of wildlife according to the conventional way in which time, work and leisure are conceived, practiced and organized in the modern sciences and advanced nation states.

The third focus of the study, which closely relates to the second, is to examine some of the social practices and self-regulatory behaviour towards wildlife use by considering how time is reckoned as an aspect of the traditional foodways of the Belcher Island Inuit.

## KEY PERSPECTIVES

Human environmental relations in general, and systems of wildlife management and use in particular are frequently thought of and expressed primarily in terms of abstract conceptual models.

One model that has received widespread attention over the last few years is referred to as the "tragedy of the commons". As originally put forward by Garret Hardin (1968), the "tragedy of the commons" refers to those situations where the actions of a human group seeking to maximize individual profit results in the destruction of common property resources. There is no technical solution to the management of common property resources because it is the individual profit-oriented values and behaviors of human populations that result in the destruction of the habitat and depletion of the resources. Thus, the very values that give meaning to the use of the resources result in the excessive utilization of those resources, unless human use is externally controlled and regulated by a management system based on concepts of maximum or optimal sustained yield.

Although the "tragedy of the commons" and other models of human environmental relations are presumed to be rooted in the biological sciences, they are also intimately intertwined with the values, knowledge, and beliefs that collectively constitute an ideology of a particular cultural group.

Hence, in the "tragedy of the commons" for example, it is clear that the emphasis placed on human behaviour is primarily assumed and explained according to how society is organized and directed towards the individual accumulation of capital for profit maximization without regard to the social group or the environment and its resources.

One of the problems in focussing on the human use of the environment, and systems of wildlife use and management within a conceptual framework is that as these models become institutionalized as forms of social reality, more value is often placed on the model itself, than on the particular human ecological condition(s) it purports to explain and predict[2]. Unfortunately, when this happens alternative systems of wildlife use and management tend to be ignored or dismissed because the model creates an expectation of cultural sameness. In other words, the model no longer exists as an abstract or conceptual tool, but becomes a mind-set that creates an expectation of cultural homogeneity rather than diversity. In these kinds of situations, minority cultural traditions such as those embraced by northern indigenous populations tend to be dismissed as an illegitimate vantage ground for social criticism relative to the mind-sets of the more dominant industrial and scientific-oriented society.

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[2] This explains, in part, why models that are based on standard concepts such as carrying capacity continue to be widely used in the resource sciences, despite that the notion of carrying capacity has very limited utility in human ecological research (Freeman, 1985a:246).

From a cultural ecological perspective, however, there is widespread evidence suggesting that not all societies organize and direct their behaviour towards profit maximization (Sahlins, 1972). As a result, there is a growing interest in focussing upon human-wildlife interactions and systems of wildlife use and management as actual living social processes. That is, rather than simply viewing wildlife use and management in the form of an abstract model or professional activity, based upon a scientific form of knowing, there is a need to consider how wildlife relations are actually integrated into, and occur as part of the lifestyles of a human social group. In other words, how are wildlife use and management an example, or a manifestation of the historical, social, ideological, and other cultural factors that constitute human adaptation in a particular ecological setting? Consequently, from a human ecological perspective, the use and management of wildlife is viewed as social process, whereby the human use of nature is intimately intertwined with the human use of humans (Bennett, 1976). This is one of the reasons why human ecologists place great attention upon understanding how systems of social relations work. In this study, an emphasis will be placed on describing how wildlife use and values are related to human social processes by examining their context in relation to the meaning and organization of time, work, and leisure.

The relevance of lifestyle to understanding the use, and management of wildlife becomes important when we compare and contrast how wildlife is used and valued in both subsistence and industrial contexts. In the industrial system, wildlife is experienced, and conceived of, within a highly particularistic context, whereby:

1. the users and managers of wildlife are separated;
2. the use of wildlife tends to be based on the segregation of work and leisure into two distinct social institutions; and
3. the economic mode of production is highly compartmentalized into producers and consumers.

In contrast, indigenous systems of wildlife use tend to involve a lack of separation between (1) the use and management of wildlife and (2) work and leisure. Moreover, because individuals are directly involved in the production, distribution, and consumption of wildlife, the economic mode of production becomes integrated and directed towards use as opposed to accumulation. In the indigenous context, therefore, wildlife use and management need to be recognized in a holistic, or ecological context, compared to the fragmented and particularistic approach that has evolved within the advanced industrial societies.

# CHAPTER III

# THE SETTLEMENT AND ENVIRONMENT

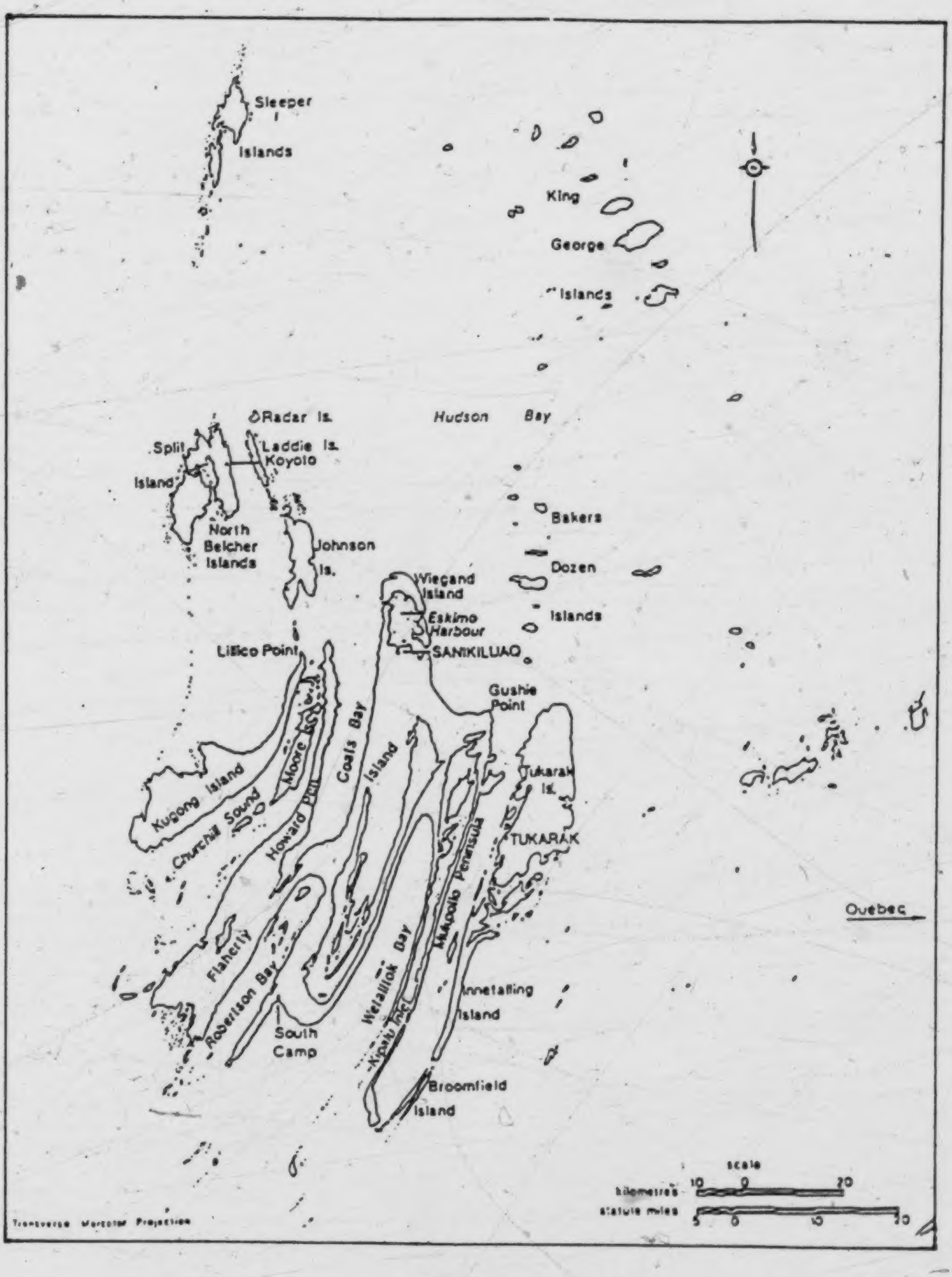
It is not possible to understand the patterns of human activity associated with the hunting and fishing way of life, and how Inuit perceptions of time, work and leisure are related within this kind of outlook towards life, without taking into consideration some of the ecological and historical circumstances that contribute to the contemporary role and patterns of wildlife use.

In this chapter, therefore, it will begin by briefly describing some of the ecological constraints that are associated with wildlife harvesting, which will be followed by a discussion of the history and demographic trends of the Belcher Island Inuit. The chapter will conclude with a review of the contemporary community economy.

## THE ENVIRONMENT

The Belcher Islands is a small, low-lying archipelago that covers approximately 3,218 square kilometers in southeast Hudson Bay. Aside from the few places where cliffs rise to a height of 70m, the topography is generally low and rolling. The highest elevation is located in north Tukarak Island, where the land rises to a maximum of 150m above sea level (Figure 2).

The archipelago consists of a series of main islands that are surrounded by numerous small-sized groups of off-shore islands as well as shoals and rocky outcrops which emerge above sea level during low


Sleeper
Islands
King
George
Islands
Hudson Bay
Radar Is.
Laddie Is.
Koyolo
Split
Island
North
Belcher
Islands
Johnson
Is.
Bakers
Dozen
Islands
Wiegand
Island
Eskimo
Harbour
SANIKILUAQ
Lillico Point
Gushie
Point
Tukarak
Is.
TUKARAK
Kugong Island
Churchill Sound
Moore
Howard Bay
Coats Bay
Island
Flaherty
Robertson Bay
South
Camp
Wetalltok Bay
Mukapolio Peninsula
Annetalling
Island
Broomfield
Island
Quebec
scale
kilometres
10 0 20
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5 0 10 20
Transverse Mercator Projection

FIGURE 2: PLACE NAMES IN THE BELCHER ISLANDS

tide. Amongst the indigenous inhabitants of this archipelago, the islands are referred to as qikitait (pl.) while the general term for rocks that appear above sea level during low tide are known as ikauait (pl.). Flaherty Island is the largest of the main islands (ca. 1,562 $km^2$), while Tukarak (ca. 346 $km^2$) and Kugong (ca. 320 $km^2$), the next largest islands, are approximately the same size. The other main islands include the north Belcher Islands, the Sleeper Islands and, although much smaller in geographical area, the King George Islands and the Baker's Dozen Islands.

The relatively large but unnamed islands east of Tukarak Island in Figure 2 are also part of the Belcher Islands region. To the Islanders these islands are known as salikuit. In referring to the places within this archipelago, it should be emphasized that the names, as shown in Figure 2, are of limited use to the Belcher Island Inuit, primarily because they use a traditional system of place names. This traditional system of place names is extensive and profound, as it reflects the detailed manner in which the Inuit of this archipelago are familiar with the lands and water they use and occupy.

The geology of the Belcher Islands consists primarily of Precambrian bedrock from past volcanic activity. Based on the abundance of pillow structures, Donaldson (1986) suggests that much of this volcanic rock was deposited in a submarine environment. The stratigraphy and lithology of the Belcher Islands, however, is complex due to the intricately folded bands of sedimentary rock that are present. These folds plunge to form a series of anticlines and synclines that gives the islands a north-northeasterly orientation

(Jackson, 1960). Subsequently, past glacial activity has scraped and polished the underlying bedrock, to produce a landscape that is characterized by long smooth ridges. Between these ridges, and in lowland areas throughout the tundra landscape, there are countless number of freshwater lakes of variable size and depth.

Although the Belcher Islands at 56 N latitude are well south of the Arctic Circle (66 N lat.), the climate and vegetation remains distinctively arctic. Winters are long and cold with the average temperature ranging between -30 and -9 C for several months. These cold temperatures combined with the strong, prevailing north-northwesterly winds create severe windchills. During the short summer season the average temperature is 10 C. As summer advances, there is a high incidence of rain, fog, wind, low cloud cover and overcast conditions. The average annual precipitation is 250 cm (Maxwell, 1986). In October, snow starts to fall, and remains (over the land) until May. In November, lakes begin freezing and by mid-December extensive landfast sea-ice has formed throughout the archipelago, except in exposed locations where open water persists due to strong winds.

Vegetation in the Belcher Islands is characteristic of low arctic tundra. It is dominated by mosses, lichens (i.e. reindeer moss), sedges, various flowers and extensive patches of dwarf willow and birch that creep along the shallow soil and rocky land. There are different types of berries, such as blueberries, cranberries and blackberries. These berries are generally picked upon ripening in late summer and early autumn. However, cranberries are also picked in the spring. In autumn, cranberries are hard and dry but after being frozen in the snow pack, they become soft, juicy and favorable for eating upon thawing. Unlike the situation at Kuujuaraapik (also known as Poste-de-Baleine, or Great Whale River) on the east coast of Hudson Bay, where the tundra and treeline meet (i.e. taiga), no trees grow in the Belcher Islands.

With freezing temperatures persisting for an extended period of the year, most biological productivity in the Belcher Islands occurs within the marine environment. In general, throughout the arctic, terrestrial productivity is about one-tenth compared to that occurring in the marine environment (Peterson, 1976). In this regard, therefore, although the terrestrial and freshwater environments are important, in the Belcher Islands marine productivity is more important for much of the year. Hence, the Belcher Islands is primarily an arctic, maritime environment.

## FISH AND WILDLIFE

Compared to other areas in the Hudson Bay region, one of the limitations to the hunting way of life is that there is not an abundance or diversity of fish and wildlife in the Belcher Islands. The few species that are available are widely dispersed throughout the entire archipelago. In terms of their bioenergetic value, the most important species occur in association with the marine environment, namely sea mammals, sea birds, and to a lesser extent, fish, shellfish, and some marine invertebrates. Some marine plants are also eaten but, they do not make a significant quantitative contribution to the diet. The same applies to the various plants and berries that are gathered and eaten, from the land. In association with the low diversity of plant life, there are few animals on the land. In contrast, the bird life is quite rich and varied. However, aside from the numerous song birds most of the bird life is also closely associated with the marine environment.

With the primary focus of hunting oriented towards the marine environment, a further limitation to the hunting way of life stems from the very high frequency of windy weather. In the winter, travel over the sea-ice is restricted by frequent blowing snow and severe wind chill events that create blizzards (i.e. pitsituq). Following break-up of the sea ice, it has been estimated elsewhere that the expectation of weather suitable for open-water hunting is seldom more than 10 per cent of total daylight hours, and it gradually deteriorates as the season advances (Freeman, 1967; 156; McLaren and Mansfield, 1960). In this regard, Freeman (1982: 956) has emphasized:

> wind is the single most important factor adversely affecting the outcome of marine hunting at all seasons of the year. Thus, what animals there are, more often than not, cannot be harvested at will.

Table 1 lists the sea mammals (which must come to the surface to breathe) that are seasonally available in the Belcher Islands. It includes two anadromous species. One is the polar bear, nanuq, which migrates seasonally between the marine and terrestrial ecosystems. The harbour seal is also anadromous because it migrates between the freshwater and marine environments.

## TABLE ONE

## SOURCES OF MARINE AND FRESHWATER WILD FOOD STUFFS

### Puijiit: Mammals of the Sea

| Inuktitut Name | Life-style[3] | Common Name | Scientific Name |
|---|---|---|---|
| natsiq | * | ringed seal | Phoca hispida |
| ujjuk | * | bearded seal | E. barbatus |
| qairulik | - | harp seal | P.groenlandica |
| qasigiaq | + | harbour seal | Phoca vitulina |
| nanuq | + | polar bear | Ursus maritimus |
| aiviq | * | walrus | O. rosmarus |
| qilaluaq | - | white whale | D. leucas |

### Iqaluktuq: Fish

| Inuktitut Name | Life-style[3] | Common Name | Scientific Name |
|---|---|---|---|
| iqaluuppik | + | arctic char | Salvelinus alpinus |
| uugaq | * | tom cod | Boreogadus saida |
| qulilirraq | - | capelin | Mallotus villosus |
| kanajuq | * | sculpin | M. guadricornis |
| uviluk | * | blue mussel | Mytilus edulis |
| mirqutik | * | sea urchin | S. droebachiensis |
| quqsaruq | * | sea cucumber | Cucumaria frondosa |
| aggaijuuq | * | starfish | Leptasterias polaris |
| ammuaumajuuq | * | clam | Mya trucata |
| kapisilik | * | lake herring[4] | Coregonus artedi |

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[3]. Lifestyle Notation:
- * Annual, non-migratory occupant
- - Seasonal, migratory occupant
- + Andronomous occupant

[4] Landlocked, freshwater fish

In the Belcher Islands, the Harbour Seal, qasigiaq, inhabits the long, narrow "U"-shaped lake in Flaherty Island (Figure 2). The name of this large lake is sometimes referred to as qasigalik (literally meaning it has freshwater seals), and it is connected to the sea by a large river in south Flaherty Island, named kuuraluk.

The ringed seal, natsiq, is widely distributed throughout the arctic. It is ubiquitous in the Belcher Islands. It is, however, much smaller in size compared to the same species located further north. In general, natsiit (pl.) inhabiting the arctic become progressively larger the further north one goes.

The bearded seal, ujjuk, is the third important marine species. It is significantly larger than the ringed seal, and is uniformly distributed throughout the archipelago, though not as abundant as the ringed seal. The harp seal, qairulik, however, is not common in the Belcher Islands. As a migratory species, it is occasionally seen in the waters surrounding the Sleeper and King George Islands but, in general, only a few harp seals from the Newfoundland front are thought to migrate into southeastern Hudson Bay.

The white or beluga whale, qilaluaq, is also an important migratory species that inhabits the waters of the Belcher archipelago during the open water season. On occasion, a few winter in the area by using the open bodies of water found in the sea ice. This kind of situation occurred in the Belcher Islands during the 1950's, and white whales have been observed during the winter in James Bay (Jonkel, 1962) and in the high arctic region as well (Freeman, 1968).

The walrus, aiviq, is another large marine mammal that inhabits the Belcher Islands. They are respected by the Inuit on account of their strength, and for the way the walrus protect each other while being hunted. Although the walrus is less common than it was several decades ago, a few abide amongst the off-shore islands south of Flaherty Island, while a larger group is located further north, around the Sleeper Islands and King George Islands.

The only other large marine mammal that is known to occur in the Belcher Islands is the killer whale, *aarluq*. In 1986, several white whale carcasses were found floating in the sea by hunters. Due to the condition and manner in which the pieces of the carcasses were found, hunters concluded that killer whales were in the region. There are also places where the bones of killer whales can be found, such as in the King George Islands. Overall, however, killer whales are not usually encountered nor do they have any direct involvement in the Belcher Inuit hunting way of life.

Of the few fish species that occur in the Belcher Islands, all are associated with the marine environment with the exception of lake herring and brook trout. These latter two species are landlocked in freshwater lakes, and characteristically small in size.

Arctic char, *iqaluuppik*, is the most desired and important fish in nutritional terms. While cod, *uugaq*, sculpin, *kanajuq*, and capelin, *quililirraq*, are marine species, *iqaluuppiit* (pl.) are anadromous. The other kinds of marine foods in the Belcher Islands include certain shellfish such as the blue mussel, *uviluk*, and clam, *ammuaumajuuq*, and several marine invertebrates such as the sea urchin, *mitqutik*, sea cucumber, *quqsaruq*, and starfish, *aggaijuuq*. These shellfish and marine invertebrates are primarily benthic species, as they occur in association with the sea floor habitat.

Aside from the species mentioned, there are a few other species of fish in the Belcher Islands. Those listed in Table 1, however, are the only ones the Inuit use for food.

In contrast to the fish and animals, the bird life in the Belcher Islands is extremely rich and varied (Manning, 1976; Freeman, 1970). Table 2 lists only those birds that are part of the Inuit diet, through consumption of meat and eggs. It does not include the rough-legged hawk, peregrine falcon, jaeger, raven, snowy owl, short-eared owl, scoters, whistling swan, other sea ducks, and the variety of song birds that migrate to the archipelago. With exception of the snow goose, kanguq, all the birds listed in Table Two nest in the Belcher Islands.

Aside from the rock ptarmigan, aqiggiq, which inhabits the terrestrial environment, all the other birds that the Inuit maintain a direct dependence upon are associated with the marine environment. The Hudson Bay eider, mitiit (pl.), is unique among these marine species because it is non-migratory. Polynyas in the landfast sea ice and open water along the floe edge enable these large sea ducks to feed year round in the Belcher archipelago.

Table 2 also includes the few, but nevertheless important animals that live on the land. Reindeer, tuktuapik, represent the only introduced species to the Belcher Islands. In the late 1800s, caribou, tuktu, disappeared from the Belcher Islands. Although the cause of the disappearance is not known exactly, it is believed that their

## TABLE TWO

## WILD BIRDS AND ANIMALS USED BY BELCHER INUIT

### Tingmiat: Birds

| Inuktitut Name | Life-style[1] | Common Name | Scientific Name |
|---|---|---|---|
| aggiagaq | - | Oldsquaw | Clangula hyemalis |
| aqiggiq | * | Rock Ptarmigan | Lagopus mutus |
| kanguq | - | Snow Goose | Chen caerulescens |
| kruksaut | - | Red-Throated Loon | Gavia stellata |
| tullulik | - | Arctic Loon | Gavia arctica |
| ipungiyuq | - | Red-Breasted Merganser | Mergus serrator serrator |
| mitiq | * | Hudson Bay Eider | S. mollissima sedentarinia |
| nirliq | - | Canada Goose | Branta canadensis |
| pitsiulaaq | - | Black Guillemot | Cepphus grylle |
| takatakiaq | - | Arctic Tern | Sterna paradisaea |
| nauraq | *<br>* | Glaucous Gull<br>Herring Gull | Larus hyperboreus<br>Larus argentatus |
| arnaviaq | - | Pintail Duck | Anas acuta |

### Nirijutiit: Land Animals

| | | | |
|---|---|---|---|
| tuktuapik | * | Reindeer | Rangifer tarandus |
| tiriganniaq | * | Arctic Fox | Alopex lagopus |
| ukaliq | * | Arctic Hare | Lepus arcticus |
| avinngaq | * | Lemming | D. hudsonius |

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1. Lifestyle Notation:

   * Annual, non-migratory occupant

   - Seasonal, migratory occupant

disappearance was associated with a particularly harsh winter when freezing rain produced an ice cover that prevented the caribou from feeding (Elton, 1942). Thus prior to 1978, when 10 male and 50 female reindeer were brought to the Islands (Ferguson, 1982), the Belcher Island Inuit had no large terrestrial animal upon which they could depend. Since their introduction, the reindeer population has grown, and they have become part of the subsistence diet. The reindeer are now widely distributed in small and large groups throughout Tukarak, Flaherty, and Kugong Islands, depending upon the specific season.

Although the fox, tiriqanniaq, is a land-based animal, in the winter it ranges out on the sea ice seeking seal carrion left behind by polar bears. Also, in the winter the fox hunt lemmings, avinngait (pl.), under the snow pack and looks for hares, ukaliit (pl.), and ptarmigan on top of the snow pack. In the spring and summer, the fox typically feeds on birds and eggs. When fat, the fox may be used for food, however, it is primarily trapped for fur.

The arctic hare, ukaliq, lemming, avinngaq, and weasel are the only other land animals in the Belcher Islands. Arctic hare is occasionally used for food, while the fur of lemmings is used as a poultice, for medicinal purposes. In summary, therefore, aside from the food obtained from reindeer, and the few ptarmigan, hares, plants and berries associated with the terrestrial ecosystem, most of the wildlife and fish that the Belcher Islands Inuit depend upon are decidedly oriented to, and occur within the maritime environment.

## HISTORY AND DEMOGRAPHIC TRENDS

Although the first Hudson Bay Company (HBC) trading post in Hudson Bay proper opened in 1749 at Richmond Gulf (Francis and Morantz, 1983), it was nearly a century later when the first HBC agent arrived on the Belcher Islands. In 1847, Thomas Wiegand, a HBC clerk posted at Great Whale River (established in 1756), travelled to the Belcher Islands to initiate trade. At this time, no population estimate of the Belcher Islands Inuit was recorded, nor was a HBC outpost established (Guemple, 1966:6). Consequently, aside from an occasional HBC agent, and few whaling ships that passed through the archipelago, it appears that few outsiders came to the Islands until after the 1900's.[1] The first estimate of the Belcher Islands Inuit population was by Robert Flaherty (1918), who came to the archipelago in 1914, in search of minerals and other resources in east Hudson Bay. At that time, the population was estimated to number around 150 persons (Flaherty, 1918).

In 1928, the HBC established its first outpost in the Belcher Islands. It was located in the southwest end of Flaherty Island, and operated on a seasonal basis. Prior to this event, however, the Islanders conducted trade with the HBC by travelling to HBC trading posts established along the west coast of Ungava peninsula. These trips were made by dog sled during late winter when the sea ice formed a bridge to the east coast of Hudson Bay. According to Belcher Island elders, Inuit from throughout the southeast Hudson Bay travelled to Richmond Gulf or Great Whale River to trade amongst themselves and with the HBC. Missionaries also used to conduct services at these relatively large annual gatherings. Although less common, trips to the mainland were also infrequently made by kayak; an account of the last such undertaking by four Islanders in 1943, is described by Ali Apakok (1985).

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[1] In the south east region of the archipelago there are containers that the whalers left for the Islanders to fill with blubber in exchange for flour, tea and so on. To the knowledge of the Islanders, however, the whalers never did return.

From 1930 to 1950 the Belcher Island Inuit population was between 160 and 190 persons. In 1933, the HBC moved the outpost to the west coast of Tukarak Island. It was operated as a permanent post by a white trader until 1943 after which the HBC reverted back to seasonal trading on an outpost basis.

During this period, the Islanders continued to live most of their lives in isolation from Euro-Canadians, aside from a few scientists who occasionally appeared on the scene, usually for short seasonal periods (e.g., Twomey, 1938). The first large influx of Euro-Canadians to the Belcher Islands came in 1941 when a court party arrived to conduct a trial associated with a messianic movement, which precipitated a number of ritual killings amongst the Islanders (Bruemmer, 1971). In 1941, the population numbered 164.

During the 1950's, the Belcher Island Inuit experienced unprecedented cultural contact. The HBC, once again, established a permanent trading post. It was managed by Native trader, who was previously posted at Great Whale River. In 1953, twenty Inuit from Ungava Bay immigrated to the Belcher Islands (Freeman, 1967). During the next year, however, a mining company was established. It employed

12 Inuit, who each received five dollars a day, some food, and tobacco. A government agent arrived to introduce stone carving, and the R.C.M.P. were sent to supervise the events. Medical staff were also present to conduct physical examinations amongst the Islanders. All of these events occurred during the summer months and, according to Desgoffe (1955,1955a) they resulted in groups of people gathering around the HBC post at Tukarak Island, even though the post was located in a relatively unproductive hunting area.

During the early 1950's Desgoffe (1955a) estimated the average household income per year to range between $103.20 to $152.00. In 1954, however, it increased sharply to $496.40, which created a relatively affluent, though temporary situation. Yet, despite the unprecedented economic affluence, the period seems to have been characterized by a general sense of sickness and hunger. Many of the Islanders, upon being diagnosed with tuberculosis, were sent to Moose Factory or Hamilton for treatment of up to one or more years. While these men and women were away, the people left behind in the seasonal settlements suffered from the loss of their leadership, knowledge, and skills, which placed them at a serious economic disadvantage.

Since 1960, the population has increased from around 190 to 423 as of 1986. This dramatic increase of Inuit in the Belcher Islands corresponds with the concentration of the population into a single settlement.

By the late 1960s, the population had formed into two settlements of about equal size, which are known as North Camp and South Camp. The North Camp group was concentrated around the HBC, which moved from

Tukarak Island to where the settlement of Sanikiluaq is now located. The other Inuit group concentrated around a small government school and church located in the south Belchers at South Camp (Figure 2). In 1968, the combined population of the two camps was approximately 220. And, in 1970, the people of South Camp were relocated to Sanikiluaq, which has since become the only permanent settlement in the Belcher Islands. It is located on the southeast coast of Eskimo Harbour (Figure 2). Following development of a single, permanent settlement,the population has nearly doubled.

The concentration of the Belcher Islands Inuit into a single settlement closely follows the same pattern that has occurred throughout the north. For example, in the Northwest Territories Hamelin (1979) has noted there was a 45% reduction in the number of settlements between 1961 and 1977. Similarly, the sharp population increase following relocation of the Belcher Island Inuit to a permanent settlement is also not a unique situation in the Canadian Arctic. Rather, similar population patterns appear to have occurred following the formation of nearly every Arctic settlement (Freeman, 1971). This sharp population increase is linked to the increased rate of birth, and to lower mortality in conjunction with provision of medical services. Furthermore, it appears to be an invariable consequence following the settlement of nomadic populations into permanent villages (Berkes and Freeman, 1986:432).

In Sanikiluaq, although the settlement is new and many Islanders are still making the transition from camp life, the population will likely continue to increase due to the minimal rate of outward migration, periodic immigration and the high social value placed on children. At the same time, there is an indication that the high population growth rate may start to stabilize. According to an analysis by Hamelin (1979), the sharp increase in birth rates amongst Native northerners in the Northwest Territories peaked in the 1960's and early 1970's, and has since slowed down (Hamelin, 1979).

As of 1986, of the 423 Inuit living in Sanikiluaq there were slightly more males (50.8%) than females (49.2%). One hundred and sixty-seven (39.5%) of the Inuit were 15 years of age or less, 239 (65.5%) were between 16 and 64 years of age, while 17 (4%) were 65 years of age or older. Some of Islanders, however, are not sure of their exact age since at the time of their birth there was no need to keep specific chronological records of age.

In 1986, the Inuit population at the Belcher Islands was distributed amongst 66 households, with a range of one to four nuclear families living under the same roof. The average household size was 6.5 Inuit, although there was a considerable range with some households having as many as 15 or more members.

During the first few years following relocation of the population to Sanikiluaq, families lived in a mixture of houses, wood-heated canvas tents, and snow houses during the winter. By the mid-1970s, these latter types of shelters disappeared from the scene, although some families continue to choose to live in tents along the beach while in the settlement during the summer. People also live in tents during the autumn if they are displaced from their homes for renovation and repair work.

Today, although all Belcher Island Inuit live in modern, furnished homes, there continues to be a housing shortage due to the small size of many houses. In 1985, for example, the family with whom I lived had eight members living in a two-bedroom house. This kind of living arrangement was not an exception, and similar crowded conditions existed in several other households.

## COMMUNITY ECONOMY

Despite the relative loss of nomadic adaptation and other changes following relocation of the population to a permanent settlement, the way of life in the Belcher Islands continues to be oriented to, and dependent upon, the subsistence harvesting of fish and wildlife. The significance of this dependency is reflected by the extent to which the full range of wildlife species available continue to be harvested throughout the entire archipelago, and in consideration of the role wildlife harvesting plays as part of the economic mode of production within a mixed economy.

### SUBSISTENCE ECONOMY

Due to the dispersed distribution of the fish and wildlife that the community continues to depend upon, there remains a need to maintain a high degree of mobility in order to procure the fish and wildlife that are seasonally available. Since the 1960s, dogs and kayaks have been replaced by snow machines and motor-powered boats respectively during the sea-ice and open-water periods, while all-terrain vehicles are used to travel over the land during the snow-free period. Without the use of these modern modes of transportation, which are primarily associated with outdoor recreation in industrial society, the Inuit would have to be wholly dependent upon the purchase of imported foodstuffs obtained from one of the two stores in the settlement.

Figure 3 illustrates the outer extent of seal and whale hunting, as well as the important places where char are fished within the archipelago. The outer extent of seal as shown in Figure 3 generally corresponds to the floe edge during the sea-ice period, although it masks the variability involved in this dynamic, changing environment. In addition to the areas where whale hunting occurs in Figure 3, whales may be harvested in the open water season from camps on the Sleeper Islands, or by taking extended trips to where they appear in certain estuaries along the east coast of Hudson Bay. Aside from the specific locations that indicate char fishing in Figure 3, char are also fished in the Sleeper Islands during the open-water period. During the sea ice period access to the Sleeper Islands is severely restricted because of the open water leads in the ice.

Figure 4 illustrates the wide distribution of three other harvesting activities that are associated with the marine environment, namely duck and egg hunting, walrus hunting, and polar bear hunting. Just as the outer range of winter seal hunting is limited by the floe edge, the same applies to polar bear hunting. Over the last few decades walrus hunting has declined in importance. In the past, walrus was a primary source of dog food, but since snowmobiles have replaced dogs, walrus are no longer hunted as extensively as before. Nevertheless, walrus hunting does take place at those specific areas that this

FIGURE NOT INCLUDED DUE TO COPYWRITE RESTRICTIONS

Figure 3: Outer Extent of Char Fishing, Seal
And Whale Hunting (Brody, 1976)

FIGURE NOT INCLUDED DUE TO COPYWRITE RESTRICTIONS

Figure 4: Outer extent of Duck, Walrus and Polar Bear Hunting (Brody, 1976).

large marine mammal can be found, mainly around the Sleeper Islands, and in the off-shore islands south of Flaherty Island. Although a variety of ducks is harvested, the areas indicated in Figure 4 primarily reflect the outer extent of harvesting the non-migratory, eider duck population.

## CASH ECONOMY

For several decades now it has become necessary to acquire cash. With the formation of the modern settlement a small wage economy has evolved. However, it only employs about one-fourth of the working population. The remaining three-quarters acquire cash through (1) government transfer payments such as family allowance, pensions, and child tax credits, (2) production and exchange of commodities for export; and (3) miscellaneous activities that may include periodic wage employment, honorariums, and earnings from playing bingo or small cash lotteries.

The bingos and lottery draws are managed by one of the community organizations. The bingos are called over the community radio, and the Inuit play in their homes. They are held three to four nights a week, and when participants purchase their cards at the radio station during the afternoon they may also buy "nevada" lottery cards. The bingos and lotteries are the primary source of revenue for community organizations, and a significant portion of the community plays bingo regularly.

## Wage Employment

Since the settlement was formed in 1970, a small wage economy has evolved. In 1986, the wage economy provided employment for twenty-five percent of the working Inuit population between 16 and 64 years of age. Of the 59 wage employment positions, 44 (18%) were full-time, and 15 (6%) were regular, part-time work. Thus, aside from any short-term or temporary wage employment opportunities occasionally available, seventy-five percent of the Inuit working population was "officially" unemployed by the formal, wage economy, during the study period.

The majority of the wage employment positions involved the provision of government services at the municipal, territorial and federal levels. The Municipality of Sanikiluaq employed the most Inuit through provision of municipal services that included an administrative staff consisting of a manager, bookkeeper, housing clerk, secretary and janitor; a public works staff comprised of a foreman, heavy equipment operator, oil-burner mechanic, mechanic, water delivery crew, sewage and garbage-pick up crews, and road maintainer; a housing maintenance staff for public and municipal housing; and, a municipal airport staff comprised of a observer-communicator and back-up, an airport maintainer and a janitor.

The Government of the Northwest Territories (GNWT) employed a smaller number of Inuit in positions relating to education, maintenance of government housing, interpretation services and custodial work in the school and government buildings. In addition, an Inuk is employed by GNWT as a Government Liaison Officer between the people and all the government departments servicing the community. A further wage employment position was held by the member elected to represent the community in the Northwest Territories Legislative Assembly, who also employed a part-time constituency assistant. At the federal level, two Inuit were employed as interpreters at the nursing station which until 1987 was operated by Health and Welfare Canada. Also, at the federal level, custodians were employed for federal buildings.

The remaining wage employment positions held by Inuit occurred in association with the corporate sector, with small commercial businesses or with one of the non-profit community organizations.

Aside from the Hudson's Bay Company, which provided four full-time positions to stock shelves, as cashiers, and to perform office work, there were no private businesses in the settlement.[2] The sale of gasoline and heating oil delivery service, however, was operated in a private business fashion, through a contract with Shell Canada. It is managed by an Inuk who employs two other Inuit to help operate the business.

The community Co-op store, which also manages the motel and the local post office, was the largest non-government source of wage employment. It employed eight Inuit on a full-time basis; and, at peak times such as when several outside construction workers were staying at the motel during a construction project, additional staff were employed.

An Inuk is employed as the ticket agent with the airline company servicing the community. Yet, aside from the two radio announcer, bingo callers and secretary-treasurers employed by the community radio society or one of the other non-profit community organizations, there are few other regular full or part-time wage employment positions for Inuit in the settlement.

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[2] During 1986, two Inuit tried to establish a restaurant but early in the following year it ceased operations since they were not making enough revenue to cover operating expenses and wages.

Short-term wage employment positions are available from time to time. These positions may be associated with unloading supplies during the summer sealift, and construction projects which may (but not necessarily) employ Inuit. During the spring, the Municipality generally employs up to a dozen Inuit to clean-up the settlement; and, there are other short-term projects that the Municipality or a community organization may initiate to improve the quality of life in the settlement, or to provide a community service. For instance, in the summers of 1986 and 1987, seven to ten Inuit were hired to clean up the tailings from the soapstone mines on Tukarak Island. Finally, there are other odd jobs such as periodic prison guarding, and interpretation and translation for those Inuit who are bilingual in Inuktitut and English.

With the exception of the Municipality, few Inuit occupy the professional positions in Sanikiluaq. Consequently, the five teachers, two R.C.M.P. officers, two nurses, social services worker, power plant operator, wildlife officer, housing carpenter, plumber, community economic planner and the managerial positions at both the Co-op and the HBC are filled by outsiders. Most of the outsiders occupying these professional positions originate from southern Canada and all but a very few work in the settlement for more than two years. Thus, although the white professional population is a permanent characteristic of the settlement, it is also highly transient which tends to discourage cross-cultural integration in the community.

## Small Commodity Production

Although the official unemployment rate in Sanikiluaq during 1986 was seventy-five per cent, this does not mean that they were not actively working, or participating in the community economy. Rather, all that the employment figures tell us is that seventy-five percent of the working population in Sanikiluaq does not work according to criteria as defined within a formal, industrial wage economy.

For Inuit, work is not simply associated with wage employment, or with placing a cash value on time. Furthermore, as the brief outline of wage employment opportunities indicates, a fully developed wage economy is not feasible in a small settlement due to the nature of the commercial sector, and the limited number of employment opportunities the public service sector can support.

While, with time, Inuit may come to fill some of the professional positions held by outsiders, there is little evidence to believe that wage employment in the community economy will greatly expand in the future. Hence, although some Inuit would like to see more wage employment opportunities available, the majority of the 'unemployed' working population lead a way of life oriented around a mixed economy.

Until the early 1980's, one of the main commodities produced and exchanged for credit or cash was fur in general, and ringed seal fur in particular. The harvesting of seals was based on a routine that involved the cooperation and sharing of skills between men and woman. During the day, if the weather permitted, the men would go seal hunting, and the woman would prepare the skins. The seal provided food, and the furs were used to make clothing, or exchanged for cash. This simple but productive pattern was part of a way of life for most Inuit households throughout the entire arctic, until the European Economic Community placed a ban on the import of seal products in response to several years of protest against the harp seal in Newfoundland.

Today, only polar bear furs, polar bear bladders, and fox furs are exchanged for cash in the Belcher Islands. The community is allocated and manages a quota of 25 polar bears. On average, they are worth one thousand dollars per fur and, in 1986, polar bear bladders were sold at twenty dollars per 28.4 grams, for a total value of $2810.00. Fox are not abundant in the Belcher Islands, and few hunters maintain regular trap lines. Although no attempt was made to estimate the number of fox harvested, during 1986-87 the total commercial value of wildlife harvesting was most likely less than $32,000.

Thus, in contrast to claims which often emphasize the rapid and widespread commercialization of wildlife, in the Belcher Islands the commercial value of wildlife is considerably less than its subsistence or domestic value. This pattern is not limited to the Belcher Island situation, but is consistent throughout most Inuit communities across the arctic.

Compared with other Inuit communities that have been severely disrupted by the lack of alternatives to adjust to the loss of seal fur markets, the Belcher Island Inuit are fortunate because they have a relatively dependable and accessible supply of soapstone to support the production and sale of stone carvings. In other communities, such as those situated in the high eastern arctic, they have not been as fortunate (Wenzel, n.d.). In these communities, which have yet to find an alternative to the production of seal fur, there is a need to recognize that the decline of the seal fur market has not only resulted in economic disruptions, but involves dislocations experienced within the social relationships that give meaning to family, and community life.

With the decline of the fur trade, in the Belcher Islands the production of soapstone carvings has become the single most important source of income in the community. Of the 66 households in the community, 50 (75.8%) were dependent on one or more carvers. In total, 48 per cent of the working population depended on carving for cash. The majority of carvings, aside from those sold privately or to the HBC store, are sold to the community Co-op, which is a member of the Arctic Co-op Limited (ACL). In 1986-87, approximately 40 per cent of all the Inuit carvings marketed through ACL were produced in the Belcher Islands. Due to the limited number of other alternatives that enable the Inuit to capture cash, it should not be surprising that carving and hunting within a mixed economy are inseparable:

> You can't talk about hunting without talking about carving and you can't talk about carving without talking about hunting. You see, to hunt you have to carve for the money to buy gas, supplies and parts. At the same time though, you have to hunt to get food, or else the money made from carving has to buy food from the store. If you buy food from the store, then there is not enough money to get supplies so you can get soapstone

> for carving. So, if you know what I mean, you have to hunt to carve and carve to hunt (Field notes, 1986).

## THE VALUE OF FISH AND WILDLIFE

Aside from the commercial value of the polar bear and fox, the products from hunting and fishing have no monetary or market value. However, they do provide a substantial contribution to the community economy in the form of food, clothing and certain tools, and for medicinal practices. Since the primary use of fish and wildlife occurs within the domestic, or informal economy, there is a tendency to underestimate the value of wildlife harvesting, because the products have no market measurement.

In order to measure the continued value of wildlife harvesting it has become popular for social scientists to assess the harvested products, by imputing a cash value according to their replacement cost. The actual replacement value is determined by assigning the cost to purchase an equivalent amount of food at the prevailing market price (Usher, 1976; Rushforth, 1977; Pavich, n.d.). Although these type of assessments are useful, it should be recognized that there is no replacement value for wild foods for two reasons. First, most store bought foods in the north are nutritionally inferior to wild foods; and second, the manner in which wild foods are procured, handled, distributed, and consumed are integral factors in a comprehensive approach and outlook towards life.

In other words, despite whatever bioenergetic or other monetary value that wild foods impart, it is quite erroneous to suggest that fish and wildlife have only a bioenergetic value, and that wildlife harvesting is only a utilitarian activity or economic proposition.

# CHAPTER IV

# SEASONAL ROUND OF SUBSISTENCE

On the Belcher Islands, the clock has become an important mode of reckoning time. This is particularly evident in the settlement where certain activities and events are structured according to the rigid schedules that have been introduced, for example, through formal education and wage employment. Moreover, although the concept of counting and measuring time according to seconds, minutes and hours has only been introduced within the last few decades, a vocabulary of new phrases and words has been incorporated into the traditional language to express clock time.

The clock, however, is an artificial, human-centered image of time, and despite its importance in settlement life it remains prevalent and meaningful for the Belcher Island Inuit to reckon and structure periods of time in relation to natural events. At the broadest level, these natural events are organized into the different seasons of the year. In this natural context of time, each season is viewed as a cycle of reoccurring periods that are designated according to, and in relation with, hunting and gathering specific kinds of wild food species.

The purpose of this chapter is to describe how wild food species contribute to the human diet in Sanikiluaq, and to examine some of the relationships associated with the harvesting of fish and wildlife during the different seasons of the year. It will begin by an overview of some of the dietary preferences and food habits amongst the Belcher Island Inuit, in order to illustrate the persistence of the traditional food ways as part of the contemporary lifestyle. It is assumed that some understanding of the these dietary preferences and food habits is necessary, particularly in light of the way animal protection advocates often suggest that the subsistence use of wild foods is no longer necessary due to, amongst other things, the availability of alternative substitutes. It will conclude by a discussion of the seasonal round of subsistence activities, as a way to describe and examine how time is reckoned and organized in the hunting way of life.

## DIETARY PREFERENCES AND FOOD HABITS

Among the Islanders and in other Inuit communities throughout the arctic the current diet consists of a mixture of locally available wild and imported foods. Today, few can imagine life without at least some imported food, particularly tea and bannock.[3] Indeed, a meal is not complete until bannock and tea are consumed. However, as tasty and appealing as some imported foods may be, they cannot replace or substitute niritutiit (literally meaning 'real or genuine foods'). In short, real and genuine foods are the basis of community health and a distinctive way of life. Without real foods, life is beyond comprehension. It is apparent, therefore, that although the community is less economically dependent on wild foods in a historical context, they are the preferred foods and remain essential items in the contemporary Inuit diet.

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[3] Bannock is made from a mixture of flour, lard, salt and baking powder which is mixed with boiling water and shaped into long coils for deep-frying.

Like Inuit throughout the Arctic, the Belcher Island Inuit dependence upon wild foods involves a rich and complex food system that has developed through time. People know, for instance, the types of wild foods that can be consumed together, and those which cannot be combined in a meal. Cod and seal fat may be taken together to provide an aesthetic and nourishing meal, yet, char and seal fat are never taken together because they cause indigestion.

People also know the quantities of certain foods which can be eaten at a particular time, for too much of a particular food is not healthy. For example, if too much fat and not enough meat has been consumed, the condition is referred to as *uqsuulingajuq*. People believe, however, that a person's body informs them of the specific kinds of foods they require at different times, and under different circumstances, as well as what foods are to be taken for medicinal purposes.

Despite the few wild foodstuffs available in the Belcher Islands, the apparent lack of diversity is overcome by (1) complete utilization of the harvested animals, (2) different methods of preparation for the parts of the animals, and (3) different food preferences associated with different animal species and according to the season, age and gender within the same animal species as well.

In general, wild foods may be prepared and eaten fresh-raw or *mikigak*, frozen-raw or *quaq*, boiled or *ujuk*, dried or *nikku*, braised over fire or *pannasiak*, partially-fermented or *igunaaq*, and as an oil that has been rendered from fat and also partially fermented, known as *missaruq*. A further factor which contributes to the diversity of the diet stems from the way in which the wild foods are prepared with certain imported foods.

In order to illustrate some of the variability that is associated with the Belcher Islands Inuit diet, the composition of wild foods and the methods in which they were prepared and consumed at one spring camp are described in Table 3. All of these foods were harvested during the period at camp, except for the caribou meat which was brought by a hunter who had obtained it from a relative in northern Quebec.

The information in Table 3 represents only the foods consumed when the camp came together for collective meals over a twenty-seven day period in May. The size of the camp fluctuated between twelve and twenty members, and consisted of three to four households. Each household occupied and maintained a separate tent.

Throughout the duration of the camp, two communal meals were held every day, and wild foods were the main dietary item in every meal. These meals usually occurred at mid-day and early evening, but there was no fixed time pattern. While in camp the communal meals were usually prepared and eaten in the leader's tent except when travelling, hunting and fishing as a group.

Overall, birds were the most common wild food in the diet, accounting for fifty percent of the items served in meals. Canada geese, which nest in large numbers throughout the entire archipelago, provided food for just over a third or 37.6% of the meals, while snow geese, mergansers and ptarmigan appeared in the diet 12.9% of the meals. On all occasions ptarmigan, which are non-migratory, were eaten raw. Except for the wings and entrails of geese, the meat and organs, namely the gizzard, of these migratory species were always boiled or

## TABLE 3: COMPOSITION AND PREPARATION OF WILD FOODS BY MEAL IN A SPRING CAMP DIET, 1987

| | METHOD OF PREPARATION | | | |
|---|---|---|---|---|
| FOOD SPECIES | RAW | BRAZED | BOILED | TOTAL (%) |
| seal | 7 | 2 | 5 | 14 (13.9) |
| seal pup | - | - | 8 | 8 ( 8.6) |
| arctic char | 11 | 1 | 8 | 20 (21.5) |
| mollusks | 3 | - | 1 | 4 ( 4.3) |
| Sub-Total Marine | 21 | 3 | 22 | 45 (48.4) |
| Canada goose | 8* | 3 | 24 | 35 (37.6) |
| snow goose | - | 1 | 3 | 4 ( 4.3) |
| goose eggs | - | - | 3 | 3 ( 3.2) |
| merganser | - | - | 1 | 1 ( 1.1) |
| ptarmigan | 4 | - | - | 4 ( 4.3) |
| Sub-Total Birds | 12 | 4 | 31 | 47 (50.5) |
| caribou | - | - | 1 | 1 ( 1.1) |
| **TOTAL** | 33 | 7 | 53 | 93 |
| % | 36 | 7 | 57 | 100 |

* Wings Only

brazed over an open fire.

On several occasions, boiled geese were cooked with potatoes or pasta. Fresh vegetables were also boiled with geese. On occasion, oats were cooked in the goose broth and consumed as a thick soup. It was also customary to soak bannock in the broth from boiled geese. After all meals large quantities of tea and fried bannock were consumed. In addition, the down from harvested geese was collected and kept to make pillows and/or for use as insulation in blankets or the sleeves of jackets.

Two other important wild foods consumed during the spring camp were ringed seal (22.5%) and arctic char (21.5%). The arctic char was prepared and eaten raw or boiled in about equal proportions. Regardless of the manner in which char were prepared however, the head was always the favoured part because of its rich flavour. When consumed raw, the entrails of an arctic char are first removed, and then it is cut into vertical steaks that were turned inside out in order to eat the meat off the outer skin. The skin was also consumed, and it was common for women to eat the tails by chopping them into fine shreds with an ulu or knife. Small arctic char were usually cut into small cubes and deep fried in a flour batter similar to bannock. For one meal, arctic char was served with canned vegetables, wrapped in tin foil and baked in an open fire.

Of the ringed seals that appeared in the total diet, 8.6% were seal pups (natsiait) and 13.9% consisted of the meat, fat and organs from ringed seals one or more years older (natsiit). In all cases, the seal pups were boiled, although they were often cooked and served with older aged seal meat. Seal meat was never boiled with imported food additives. Similarly, bannock was never dipped in the broth and, although it was consumed, the seal broth was never made into a soup by adding mixed oats. When the group went on hunting or fishing excursions for the day, seal meat was sometimes lightly brazed over an open fire.

## RINGED SEAL

The ringed seal is the single most important source of wild food in the Belcher Inuit diet. Although bearded seals and harbour seal provide substantial amounts of food, it is the ringed seal that provides a secure and reliable source of nutrition. This dependence on the ringed seal takes place throughout the entire year. It is greatest during winter and lowest during summer when there is more variation in the availability of wild foods. During the field study, Islanders expressed their dependence upon the ringed seal on many occasions, as expressed in the following comment of a community resident:

> Seal is important because you never get tired of it. If the only food is eider ducks or fish or something else, after a while you start to get tired of eating those same foods every day. It is the same with whale and reindeer. But seals are different. No matter how long or how much seal you eat, you never tire of it. Some people say they need to eat seal meat every day, especially in the winter. Older people, like my mother, she always wants seal meat in the winter. When there is no seal meat she always feels cold. She says it will be the same for me when I get older. She says it is like that for all of us (Fieldnotes, 1987).

When hunting seals on the sea ice, the standard practice is to butcher and eat the first seal immediately after it has been taken. The reason for this practice is because it is the first seal that provides the energy and warmth to hunt additional seals. Therefore, when the first seal has been harvested, the hunters in the area will gradually regroup around the butchering site, to share the seal meat and have tea.

The butchering of a seal on the sea ice must be done efficiently because it becomes progressively more difficult to accomplish as the animal freezes. The first step is to lay the seal on the ice with its belly face up. A lengthwise cut is made down the middle of the belly, and then the fur is removed by cutting it away from the blubber. Once removed, the fur is laid on the sea-ice with the blubber facing upwards. Next, the envelope of blubber encasing the meat is cut off. At this stage, the seal is split down the middle to separate the rib cage so that the gall bladder can be carefully removed. It is important not to puncture the gall bladder to prevent the fluid from draining onto the meat and organs, which leaves a foul taste and results in the meat having to be discarded. As the heart, liver, kidneys, and the meat around the last four vertebrae of the spine are removed, they are placed on top of the seal hide, along with some blubber. It is these foods that the hunters will eat, once the remainder of the seal is butchered. While eating these foods, the remainder of the meat is left to freeze in individual pieces on the sea ice, as this makes them easier to lash onto the sled for transportation back to the settlement. An alternative method, however, is to wrap and tie the meat and organs inside the seal fur, which is then lashed onto the sled. If a harvested seal is not eaten on the hunt, then it may simply be tied onto the sled and butchered once back in the settlement, although some hunters prefer to butcher the seals on the sea ice before returning to the settlement.

Traditionally, aside from the gall bladder, the entire seal was utilized for food and clothing. Today, similar patterns persist. However, the skins are not always fully utilized on two accounts. First, the need to acquire seal meat continues to be high, so seal harvesting patterns have not changed significantly since decline of the seal fur trade. Second, only a small portion of furs from the harvested seals are required to meet domestic needs for winter boots, mitts and a variety of carrying bags. So, a surplus of skins now exists.

Aside from the meat, blubber and organs of the seal which are eaten, the intestines and stomach are also used. In the summer, the intestines may be boiled or otherwise cleaned, and then braided to shorten their length and hung to dry. In the winter, it is not possible to dry the intestines so, instead, they are cut into small pieces which are boiled and served with the seal meat. The stomach contents of the ringed seal, as with other marine mammals, are often eaten, particularly if it is full of shrimp (kingait, pl.), capelin (qulilirrait, pl.) or clams (ammuaumajait, pl.). Shrimp and capelin tend to be found in association with the ringed seal while capelin and clams are found more frequently in the stomach of bearded seals. Clams are also found in the stomach of walrus.

Shrimp and capelin found in the stomach of a ringed seal are usually cooked by submerging the stomach pouch into boiling water; whereas, capelin and clams found in the stomach of a bearded seal are removed and boiled. A further contrast is that clams found in the stomachs of walrus tend to be eaten raw-fresh, as a delicacy during the butchering process.

## WHITE WHALE

Although the white or beluga whale is small compared to other whales, it provides a considerable amount of food. The outer skin of the whale, muttuk, is regarded as a delicacy by the Inuit. The most favoured parts of muttuk come from the tail and the two side flippers. Muttuk is always eaten raw-fresh, boiled or raw-frozen. The large quantities of meat that come from the white whale are only eaten after it has been sliced into thin pieces and hung to dry. Dried whale meat and muttuk are often eaten together.

As with seal, the intestines of whale may be cleaned then braided and hung to dry. There is another way to prepare whale intestines which involves cleaning and cutting them into approximately 20 cm lengths. Each piece is subsequently packed with whale blubber and the ends are tied with string or sinew. The intestines are then boiled, hung to dry and, on occasion, lightly smoked. They are often eaten with dried whale meat, or any other type of dried meat.

Another part of the whale that is consumed is the cartilage found in the tail, flippers and above the head. This cartilage, or qakalaaq, is hard and crunchy. It is shaved off in thin slices and eaten raw. The long strips of sinew which are layered with the meat are also separated and dried for use as thread.

Despite the large quantities of muttuk and meat from the white whale, wastage is minimized through sharing a harvested animal with the entire community. Moreover, while in camp, the muttuk may be kept fresh for extended periods of time by cutting it into square sections which are secured to a rope and left to float in the sea water with the blubber side up. Although sea gulls land and feed upon the blubber, and with time micro-marine carnivores start to eat away at the muttuk, it will remain fresh for seven or more days when stored in this manner.

## SHELLFISH AND MARINE INVERTEBRATES

Of the different types of shellfish and marine invertebrates that are gathered, all are eaten raw. The most important shellfish is the blue mussel. It is usually eaten raw by forcing apart the two shells, scooping out the meat, and squeezing out any excess water. To a lesser extent, mussels and clams may be boiled, and then eaten by dipping the meat in butter. Mussels are considered to have medicinal qualities, and they are often requested on the community radio when required for this purpose.

## FISH

Fish are prepared and eaten many different ways. Large, fat char are eaten raw-fresh or raw-frozen. Medium-size char are often boiled, while small char tend to be cut into small cubes and mixed with flour that is deep-fried, called pannasiak.

The head is a favorite part when char is eaten raw, although parts near the fins, where the fat tissue tends to concentrate, are also highly regarded. These choice parts are known by their specific name.

In the summer, char that is split, dried and lightly smoked over a low fire is one of the favorite methods to prepare and eat these fish. Another method for preparing char is to wrap it in tin foil with canned vegetables and bake it in an open fire while in camp, or in an oven when in the community.

Cod tend to be prepared and eaten as fresh-frozen or boiled. Cod were never observed, nor heard discussed, as a food that is eaten dried. Sculpin, being much smaller in size than either cod or char are typically eaten raw-fresh, boiled, or by braising them over an open fire. In contrast to char, cod and sculpins, lake herring have scales which must be removed in order to prepare them for meals. They are usually boiled.

## BIRDS, GEESE AND DUCKS

In general, non-migratory ducks and birds like the eider duck and ptarmigan are eaten raw or cooked, while migratory waterfowl including Canada geese, snow geese, loons and mergansers are usually cooked. One exception to this pattern is when the meat and marrow of goose wings are eaten raw, or when the wings are cooked by lightly braising them over a fire. When the geese return in the spring they have accumulated large quantities of fat around their entrails, inside the body cavity. Small quantities of this fat may be eaten raw as well. However, aside from wings and fat, the meat from all migratory waterfowl is cooked.

When geese, mergansers, loons or other ducks are cooked they are usually boiled and, sometimes, braised over an open fire. In the spring, geese may be dried and taken back to the settlement for food during break-up, when other food stuffs are not as abundant. When geese are boiled they are often prepared with potatoes, onions, and carrots, or different types of pastas such as spaghetti, macaroni and packages of instant soup. These foods are served on large communal pans when eaten in tents or at home in the settlement. When eaten outside, it is not uncommon for the contents of the pot to be poured out onto smooth rocks where everyone is free to help themselves. After the main meal, bannock may be dipped in the broth from boiled waterfowl. In addition, the broth or qajuq from waterfowl, particularly geese, may also be used to make a thick soup out of oats which is referred to as qaruak. Only broth from waterfowl is prepared with oats, and it is never made with the broth from boiled sea animals.

As previously indicated, the eider duck is the staple wild food during freeze-up in late fall. Its importance to the diet continues into early winter, at a time when all families are gathered in the settlement. A typical eider duck meal at this time of year proceeds by carefully removing the wings, legs, stomach, heart and tongue from the duck. These choice parts are eaten raw-fresh, and if available, they may be dipped into a partially fermented oil that has been rendered from seal blubber, missaruq. While eating these delicacies, the remainder of the eider duck is boiled, and provides the next 'course' of the meal. These parts include the meat on the backbone, chest bone, feet, neck and head.

As with other typical meals, the meat is served in a large communal pan that is placed on the floor with everyone sitting or kneeling around it, helping themselves. Certain items are considered appropriate for elders, while others are deemed appropriate for men, woman and children. There is no need for eating utensils, other than hands and knives. During the meal young children, who may be moving in and out of the circle, sitting with their elders, or strapped to the backs of the their mothers or older sisters by a special type of blanket known as an ullipaktuq, are passed pieces of meat that are deemed appropriate for them to eat. Babies are passed food as well, although only after it has been partially chewed by an older family member in order that it may be digested more readily. After the `main course' people will gradually make their way to the sink to wash their hands before having tea and bannock, while others continue to sit and dip bannock into the broth from the boiled eider duck. At the same time, similar food gatherings are taking place in other households in the settlement.

Although each household is a separate and autonomous unit, during the mid-day and evening meals each household is connected as the days events are listened to, and discussed over the community radio. The sense of belonging, health, spirit and identity that comes with these traditional meals is extremely difficult to convey in meaningful social terms, particularly since the sense of community and approach to life includes not just relationships between people but between people, nature and the wildlife upon which they depend as an integrated whole.

In light of the complex human-environmental relationships that are involved in the dietary preferences and food habits of the Belcher Island Inuit, perhaps at least some of their spiritual importance may be conveyed by noting what other observers have suggested about the role and meaning of wild foods in northern Native society. In this regard, Hugh Brody (1981: 212-213) has commented that in contrast to the manner in which the hunting way of life is often considered by members of the southern industrial society as a form of poverty, it is the shift away from this lifestyle that creates the conditions for poverty. He continues by emphasizing:

> there is a great difference between a poor household that has a reliable and large supply of meat and a household that experience the remorseless and debilitating effects of urban poverty.

Peter Usher, who has been familiar with development of the north over the last two decades is also worth noting. He (1976: 199) observes:

> Many native northerners are well aware of the good fortune in having plenty of meat at a time when they hear increasingly of undernourishment and starvation in other parts of the world. The North may well be the only place where a poor man's table is laden with meat as a matter of course. It would surely be the height of irresponsibility to impair the productivity of lands which can supply food only in the form of meat ...

## SEASONAL ROUND OF SUBSISTENCE

The mixed economy is closely bound to a seasonal round. Although certain aspects of the seasonal round of subsistence have changed in detail over the last fifty years, it is essentially practiced according to a system of social institutions, knowledge, and beliefs that have been passed on from one generation to the next. As part of this system, time is reckoned and organized according to seasonal phases of nature which includes a complex and sophisticated understanding of how astronomical phenomena, tides, marine currents, wind and weather patterns, sea-ice formation, vegetation cycles, and the movements and behaviours of animals, birds, fish and humans interact as a whole. Knowledge of these processes is essential so that the desired resources may be successfully procured in safe fashion in pursuit of these goals under continuously changing ecological circumstances during each season.

In light of the extensive and profound system of knowledge that the continued hunting and fishing way of life demands, and the ways in which this knowledge applies to human action and behaviour in the arctic environment, the ways in which northern hunting peoples are often portrayed as moving through the lands and waters in a haphazard and random fashion, searching for whatever foods they can find are highly misinformed (see,e.g. Klee, 1976; Nietschmann, 1972). Consequently, analyses that view hunting behaviour merely as a biological prey-predator relationship, or that tend to explain hunting behaviour as if it were a decision to engage in a recreation or economic activity assume an entirely reductionist approach to understanding the human ecological condition. Indeed, because subsistence use of wildlife is self-regulating, based on need, it is only by appreciating how time is reckoned as a seasonal round that we can learn how the Belcher Island Inuit conserve and manage the lands and waters which sustain the fish and wildlife upon which they depend.

## THE SEASONS

Among the eastern arctic Inuit (Brody,1976), the annual cycle is divided into six seasons; upinguaksaq (early spring), upinguak (spring), aujaq (summer), ukiaksaq (early autumn), ukiaq (autumn), and ukiuk (winter). In contrast to the Inuit groups situated further north who experience alternating periods of total dark and total daylight during the summer and winter solstice, the sun sets and rises every day in the Belcher Islands.

Figure 5 illustrates the seasonal availability of the important groups of wild foods as they were used by the Islanders, during the study period. The information in Figure 5 is limited, primarily because it does not convey the variation that may take place between different years, and between different households within the same year. It does, however, try to illustrate the relative importance of each wild food group within the community during each particular season. Sea-ice occurs in all seasons except aujaq and ukiaqsaq, although loose or consolidated pack ice may be encountered during the open water period.

### UPINGUAKSAK

The arrival of spring is an exciting event in the Belcher Islands. It is one of the most pleasant seasons of the year, and thoughts, conversations and tasks naturally turn to anticipation and preparation for spring camp, hunting and fishing. Almost everyone in the community participates in spring camp, and the majority of families leave the

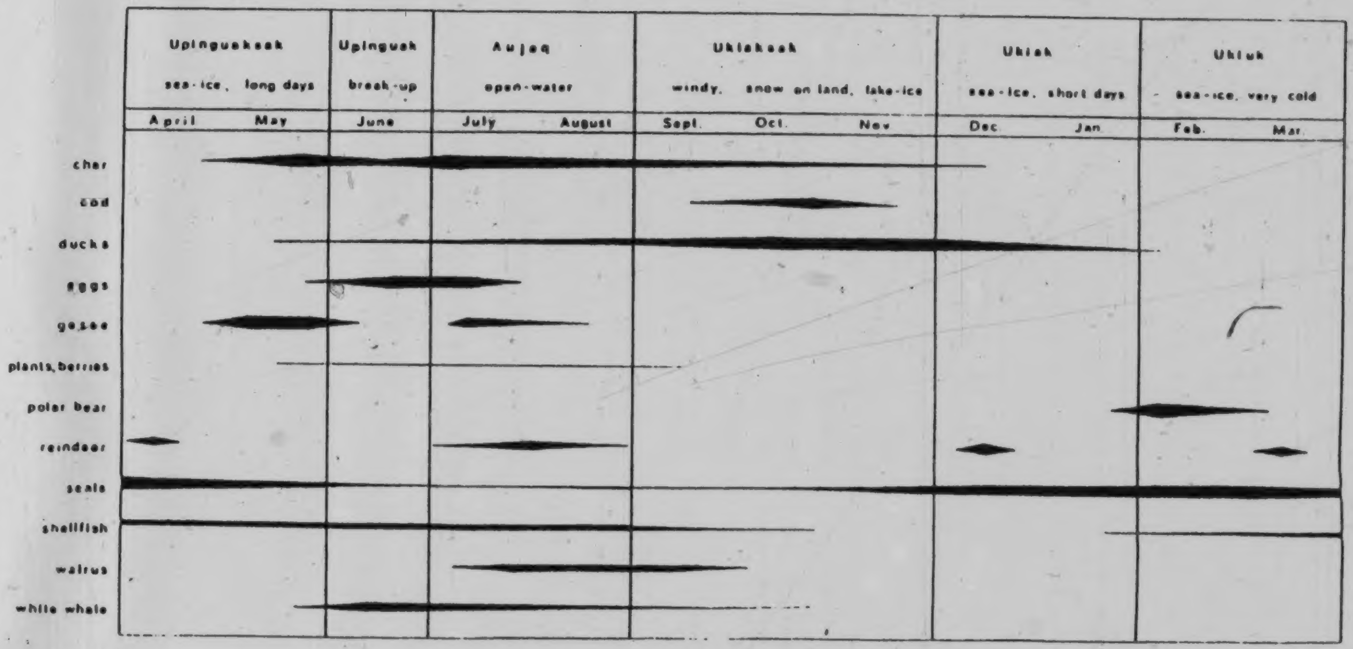

Figure 5: Seasonal Availability Of Wild Foods

settlement to live in small-sized groups throughout the archipelago. As families prepare for spring camp, the settlement is very busy and active. To an outsider, watching and participating in the events for the first time, it is as though the entire community comes alive in a festive atmosphere as winter shifts into spring.

During upinguaksak there is a diversity and abundance of wild food stuffs available which facilitates a wide range of choice in subsistence activities. These activities are constantly shifting between the inland and sea ice environments. At the start of upinguaksak, the sea ice has reached its maximum extent. As spring progresses the days lengthen, and the sea ice melts from the bottom up "as if there were a wood stove burning underneath the ice" (Fieldnotes, 1987). On the surface, the snow cover melts and forms large pools of water that appear deep blue in colour. These pools are often "knee" deep, and following a blizzard or pitsituq, their surface may form a thin layer of ice which will not support the weight of a snowmobile. A similar situation may occur while travelling on land, whereby the snowmobile breaks through the snow, and underlying pooled running water is encountered on the tundra.

As leads, aaruait (pl.), form in the sea ice and become too wide to cross by snowmobile, it is necessary to go around them by travelling inland over short distances. These inland crosses are referred to as itiliapiit (pl.). In the past, these same places were often used to portage kayaks during the open water season.

Soon after snow starts to melt and running water appears on the tundra, patches of berries and other vegetation are exposed. It is at this time of the year that song birds return to the islands. One of the berries that these birds and the Inuit gather are cranberries, kimminait (pl.). In autumn, they are hard and dry when ripe but upon thawing, after freezing in the winter snow pack, they become soft and juicy. They are often gathered in association with jigging for char or are just eaten while walking or hunting on the tundra.

Towards the latter part of April, Canada geese start to return in numerous and large flocks. Soon after the geese appear, small groups of families disperse throughout the archipelago and live in tent camps. With so many families away from the settlement in spring camp it is difficult to conduct formal community business. Consequently, Hamlet Council and other community organizations adjourn regular meetings unless extenuating circumstances arise. Those people and families remaining in the settlement during spring, because of health problems or wage employment, often send their children to spring camp with relatives. Indeed, during spring the subsistence focus shifts to an emphasis upon the family, and it is regarded as a period when children are to be in camp with their grandparents and other family relatives. The composition and location of these spring camps continuously change from year to year. In this regard, although the camps are organized around the extended family, there is considerable variation due to idiosyncratic factors, economic and technological considerations, and knowledge of, and preference for, specific places and regions in the archipelago. The people in most spring camps return to the settlement before break up; however, a few families will remain in camp until after break up, and return to the settlement by boat during the open water period. In these latter situations, the boats are transported to spring camp by sled during the late sea ice period.

In the Belcher Islands, the actual time of break up is highly variable, depending upon the localized region within the archipelago. In general, break up occurs earlier in the south Belchers and later in the north Belchers. By the end of May or early June, access to and out of the settlement is severely restricted by snowmobile, because the leads in the sea ice are too wide for safe passage, and because there is insufficient snow cover to travel over land. In 1986, the first two families left for spring camp on April 29th and returned to the settlement by boat on June 16th, after the break up of ice in Eskimo Harbour.

As indicated, there is a diversity and abundance of wild foodstuffs available during early spring. Thus, aside from the inland activities previously mentioned, namely gathering berries and jigging for char by cutting holes in lake ice, Canada geese are hunted throughout the islands. The most common method of hunting Canada geese is to wait in natural or stone-made shelters which are singularly referred to as mippivik. These mippiviit are located in favoured localities along coastlines, or inland near small ponds which remain frozen throughout most of May. Snow geese are harvested as well, but these large flocks are more difficult to hunt as they usually fly at high altitudes, on migration to nesting areas further to the north. In May, after they start nesting on the tundra, Canada geese become less common as a food source. Although the eggs are gathered if encountered, the nesting geese are not shot.

At inland locations, mergansers or rock ptarmigan may be shot while fishing, although it is more common to harvest them while travelling on the sea ice along the coast.

Throughout the entire archipelago, ringed seals are abundant on the sea ice. When seals are beside their breathing holes, basking in the sun, they are singularly referred to as _utjuq_. In the spring, ringed seals molt their fur, and young seal pups, _natsiaq_ (singular), who are shedding their white coat from birth may be seen on the sea ice with their mothers. Bearded seals may also be observed, but they are less abundant than the ubiquitous ringed seal.

Despite the abundance and availability of seals, seal hunting is selective. During the spring, seal pups are preferred because (1) they offer variation in the diet after the winter's dependence on seal meat, (2) older seals are molting their fur coats, and (3) the fur of seal pups is highly regarded in the construction of winter clothing, and particularly, for children's mitts and boots.

Hunters, therefore, may take up to forty-five minutes or more in stalking a seal, and it is not uncommon for a hunter to simply walk away upon getting within close range and determining that the seal was not a _natsiaq_. While observing seal hunting during spring camp, this self-regulatory behaviour was noted on every excursion. Despite the countless number of seals that were available and stalked, on some days, none were shot when the quality of their fur was deemed unsuitable and there was no shortage of food in camp. In this kind of situation, an entire day of seal hunting would simply end by gathering driftwood for fuel on the way back to camp.

The other important marine mammal that may be harvested towards the end of spring is the white whale. These whales migrate to the islands by making their way through open leads that form in the sea ice during break up. They are hunted at certain locations within the archipelago, where open water appears early in the spring on account of the prevailing, localized water currents and tides. When the first white whale is killed in the spring, there is a belief that rain will soon follow. On days of good weather, men and women will be seen carving soapstone, children playing and there will be numerous breaks for tea and bannock while waiting for whales at these known locations.

## UPINGUAK

During upinguak, the sea ice breaks up and the open water season begins. Because Eskimo Harbour is enclosed by land it is relatively protected from the wind; thus, the sea ice takes longer to break up in the Harbour than in the more exposed areas of the archipelago. Consequently, even though the open water period is well underway outside the Harbour, boat travel from Sanikiluaq is restricted until after break up in Eskimo Harbour occurs, which in 1986 was during the first two weeks of June.

Moreover, during the period of break up, the sea ice is not safe for snowmobile travel. Thus, aside from the few families remaining in camp during this time of the year, subsistence activities are oriented primarily towards inland fishing, and the gathering of fish, shellfish and marine invertebrates from open leads along the coast.

During break up and the wait for open water travel, the most important wild foods in the settlement are fish, mussels, and marine invertebrates, although dried whale, goose and eider meat may contribute to the diet in some households. These dried foods are often eaten with iguunaq which is a condiment prepared from partially fermented seal fat that has dissolved into an oil. If iguunaq is not available, butter or margarine may be substituted. On inland trips, some geese may be harvested and geese eggs collected; however, geese are not usually abundant near the settlement. A multitude of lakes is utilized for gill net fishing during upinguak. Some of these lakes are a considerable distance from the settlement and require three to four hours of travelling by balloon-tired all-terrain vehicles. At these distant locations, it is not uncommon for men and women to set up fish camps for two or three day periods. Alternatively, some families obtain their supply of fish by setting gill nets at favoured locations in the north end of Kasegalik Lake. As Kasegalik Lake is within a 90 minute trip from the settlement, some people set their nets and check them by travelling back and forth from the community each, or every other, day, so long as there are fish available. Returns on fishing during the break-up period are highly variable; ranging from netting 0 to over 100 lbs. of arctic char over a two-day period.

The shellfish and other marine invertebrates that are gathered during this time of limited travel come from Katapik, the narrow passage on the northwest coast of Eskimo Harbour. Blue mussels, sea urchins, sea cucumbers and starfish are collected at low tide by dragging nets attached to long poles along the sea floor. Sculpins are also gathered along the east coast of Coates Bay by casting hooks from the shore line.

## AUJAQ

After break up, families disperse throughout the archipelago and live in small fishing and hunting camps once again. At this time of the year, it is common for people who are permanently employed to spend their vacations in camp; hunting, fishing and gathering with their families and relatives. The length of stay in camp is typically limited by the amount of fuel that can be transported by boat. Thus, trips to the settlement for fuel and supplies are usually made after a ten to fourteen day period.

While in summer camp, arctic char, geese, waterfowl, and duck eggs are the most abundant and dependable wild foods available. By July, some arctic char have started migrating to the sea where is possible to net them, while others are still in the lakes and rivers where they are caught with nets or by casting hooks.

Geese, in July, are molting in large groups. Thus, when these flightless birds are encountered in open water, they are readily harvestable. Molting geese (issait) are often encountered while travelling amongst the small, off-shore islands, or in sheltered bays, inlets and estuaries along the coast where eggs are gathered from the nests of eider ducks, black guillemots, arctic terns and gulls. Eggs make an important contribution to the early summer diet and all the forementioned sea birds nest in large numbers throughout the archipelago. Towards the end of July, eggs are collected less frequently since, by this time, the embryos are well-developed and hatching is underway.

In July, the occasional bearded seal may be harvested on loose pack ice which greatly facilitates the butchering of these large animals. Few ring seals are harvested at this time of the year because they sink if not immediately secured by harpoon. Beluga whales are also taken when the opportunity arises. However, they are not selectively hunted due to their widely dispersed and migratory behaviour.[4]

Since the 1970s, the collection of down from eider duck nests has also become an integral part of the seasonal round of activity. The down is gathered in large bags, cleaned by hand, and then used for insulation in sewing blankets and a range of outdoor clothing for men, women and children.

Several customary rules apply to the collection of eider down and eggs. First, in the collection of eggs from any species including eider, tern, guillemot, herring gull and old squaw, it is necessary to leave some eggs in each nest so the female bird can raise a family. Therefore, in the collection of eider eggs, for example, where there is an average of four eggs per nest at least two are left in the nest. At the same time, however, because eider eggs are large and nesting occurs in dense breeding colonies it is common for only one egg to be taken from an individual nest.

Similarly, only one egg is typically collected from tern nests as there are usually only two eggs per nest. Tern eggs are considerably smaller than eiders but, since terns also nest in high density colonies on off-shore islands, large quantities can be gathered in a short period of time. A second customary rule, one that is associated with the collection of eider down, is to never remove all of the down from a single nest. It is important to leave sufficient down both underneath and over the eggs, for continued insulation and protection from gull predation. On occasion, therefore, it is not possible to collect down from each nest encountered because of the small quantity present and/or the excessive grass, dried seaweed and other debris that is mixed in with the down.

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[4] In the summer of 1987, one family group travelled to the Quebec coast where beluga whales are known to gather in relatively large pods at the mouths of certain rivers. Successful, in taking some whales, the harvested food was distributed throughout the entire community upon their return to Sanikiluaq.

A third customary rule involving the use of eider ducks is that only males ordinarily harvested in spring and summer. If a female eider is required for food or taken by accident, the eggs are also either taken for food or distributed amongst other nests.

In applying the customary rules guiding use of eider ducks, the Belcher Island Inuit employ their extensive knowledge of eider ducks and other sea birds. One aspect of this extensive knowledge is the method used to determine the palatability and freshness of sea bird eggs. In order to determine freshness, an egg is cradled in a pool of water. If the egg sinks then it is considered fresh and palatable. If, however, the egg floats it is regarded as not suitable for consumption due to the late stage of incubation and embryo development. Subsequently, the egg is returned to its nest. Through this simple and widely practiced method of egg collection, potential wastage is highly minimized.

By August of _aujaq_, large numbers of families gather at one of the two soapstone mines on Tukarak Island. At peak times, there may be as many as twenty-five tents at these two mines where people laboriously obtain an annual supply of soapstone for carving.

The Inuit soapstone carvings that people purchase are finely-polished forms of art. Few, however, are unaware of the laborious process involved in the production of these crafts. The mining of raw soapstone in the Belcher Islands is no small task and demands considerable physical labour. The soapstone is fractured, split and removed from the bedrock by carefully placing and hammering an assortment of steel wedges into the veins of soapstone, which must then be pried and pulled loose with a variety of crow bars, picks and other implements.

Often, however, it is necessary to first clear away rock debris or pooled water in order to access the bedrock, all of which takes much time and effort. At one of the mines the soapstone vein descends into a steep hillside, and must be fractured, split and removed by working in a crevice that is approximately 1.5 meters wide and 8 meters deep. During the fall of 1985 this mine collapsed. Fortunately, no one was working in it at the time. Once the rock is separated and removed from its source, it is carried by people to the shoreline where it is placed into family piles for loading and transporting by boat to the settlement. One of the prevailing ecological circumstances associated with mining soapstone is that wild food stuffs are not seasonally abundant within this geographical area of the archipelago. Thus, for those families who have been "dropped off" at the mines and have no boats, the low abundance of wild foods is particularly problematic.

It is possible to net arctic char at certain coastal sites that are relatively close to the soapstone camps. In addition, it is possible to take capelin in the vicinity of the camps. These small fish migrate in large-sized schools and, when they are seen feeding in shallow waters close to the shore, large numbers are scooped by hand-held nets, pails or buckets. They are welcome food stuff, and are consumed in a raw-fresh state.

Fish, however, do not provide a dependable nor a secure supply of food for people at the soapstone mines, even if supplemented by waterfowl, shellfish and wild vegetation. Consequently, it is necessary to go on extended, full-day excursions to hunt for food and to gather driftwood for heating fuel in the tents.

These hunting excursions are often directed towards the southeast area of the archipelago. While travelling in this direction, molting sea birds may be shot when the opportunity arises. The men, however, tend to search for large sea mammals, namely, ringed or bearded seals and whales. Walrus, which may be harvested in other places, at this time of the year, is not known to inhabit the southeast area of the islands. Reindeer, on the other hand, do inhabit the southeast area of the islands and during the summer each household, in camp, is allocated one reindeer.[5] If a hunting excursion is successful and the men return with a whale or reindeer, the food is distributed and shared throughout the entire camp. In light of the prevailing ecological circumstances, few can deny the adaptive significance of this practice, although it would be highly erroneous to assume that the institution of sharing has only bioenergetic or other quantitative value.

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[5] According to Nowak (1975) one reindeer provides about 45 kg of meat. This value, however, does not include the back fat and organs that are also consumed by Inuit.

Towards the latter part of August, most families return to the settlement in order that their children attend school. Also, beginning at this time of the year boat travel becomes progressively more uncertain, and dangerous, due to the increasing frequency of stormy weather and rough seas. Hence, it is essential to transport families and the annual supplies of soapstone back to the settlement before travel becomes too dangerous.

With the return of families to the settlement, the focus of seasonal activity that has been prevalent through-out spring and summer shifts away from an emphasis on family camp. Children return to school and a government sealift arrives in late August. After all the materials which has been delivered is unloaded, housing and building construction begins and continues throughout the fall. Thus, at this time of the year, hunting patterns tend to shift to short trips of one to three days duration away from the settlement.

## UKIAKSAQ

In the fall, ukiaksaq, marine mammal hunting in open water becomes undesirable, due to the increased frequency of sudden winds and precipitation that creates dangerous and uncomfortable foraging conditions. Consequently, harvesting activities are progressively oriented towards coastal or inland locations. A further restriction at this time of the year is that the availability of wild foods is less diverse as the summer migrants have moved south. In the past, ukiaksaq, was considered a "hungry season" (Freeman, 1963:61). Today, as in the past, aside from the different species of berries that are gathered, harvesting activities are focused on the procurement of fish, migrating geese and the non-migratory eider duck.

During ukiaksaq, the most valued fish species is arctic char, supplemented with whitefish and lake herring, which are netted at certain locations. At this time of the year, the arctic char return to the lakes and spawning takes place. Although a diversity of lakes is utilized, the favoured location to set nets for char is in the north end of Kasegalik Lake. Fishing in this area is attractive because of its accessibility from the settlement and, also, because while the nets are set, it is possible to simultaneously mine soapstone from one of the small islands situated on the northeast side of the lake. Since the combined weight of fish and soapstone, however, exceeds the load capacity of the all-terrain vehicles, the latter is usually piled and left until winter, at which time it is collected by snow machine and sled.

In addition to mining soapstone and netting char in Kasegalik Lake, it is also possible to hunt the harbour seal. In order to find harbour seal, an engine-powered canoe is required as they are timid and fast swimmers that require being shot from a distance. At the same time, since freshwater is less buoyant than salt water, these large seals quickly sink when killed. Therefore, the preferred method for hunting and retrieving a harbour seal is to either stalk and shoot it when it is seen on one of the numerous rocky outcrops or when it is in shallow water. A harvested harbour seal provides a considerable quantity of meat, and the skin is highly regarded for making rope on account of its strength and non-freezing attributes.

When ice starts to form in the lakes, inland fishing ceases and the focus of fishing shifts to coastal areas. As snow starts to accumulate along the coast, cod become abundant along the shoreline. Cod are caught by casting baited hooks and they can be gathered with fair success along the beach in the settlement. As the harbour begins to freeze and after the sea ice is safe to support people, men and woman will continue to fish for cod by jigging through holes cut in the ice.

Aside from fish, the other most important species that is available in ukiaksaq is the eider duck. By this time of the year, the eider ducks have finished molting and become visible as they start to fly. While molting, these relatively large sea birds feed heavily and accumulate fat which makes them a highly preferred food during the fall.

In early morning, eider ducks are hunted along the coastline by shooting them during offshore wind, so they may be retrieved as they drift towards the shoreline. During the latter part of ukiaksaq and continuing into the ukiaq period, the eider duck is the single most important wild food species and one of the few that is available at this time of the year.

## UKIAK

As ukiaksaq moves into ukiaq, the days become shorter and the sea ice period begins. Mobility, however, is less restricted since travel over the snow-covered land is possible and the formation of sea ice enables travel and the hunting focus to shift towards a greater dependence upon marine mammals. In contrast to ukiaksaq, therefore, hunting during ukiak, involves a greater diversity of wildlife. Subsequently, the subsistence diet is more varied. In addition, during December a community reindeer hunt is organized. Both the hunt, and the reindeer food has become an important part of the Christmas feast and celebration.

As in the later part of the previous season, fishing for char at inland lakes continues. When the lakes freeze and are safe to support human activities, char can be jigged with baited hooks in deep water, through holes cut in the ice. It is more common, however, to suspend gill nets under the ice, in deep water. The most intensive fishing using this latter method occurs at Kasegalik Lake, and the nets are checked at one to three-day intervals. The yields are highly variable, although it would be exceptional if more than a dozen char were netted over a three-day period. If the fish are alive when retrieved from the nets, they may be eaten raw. If they are dead, but conform to certain criteria that are used qualitatively to assess the condition of the fish, they are always cooked before being eaten. While travelling along the marine coast, or inland to check nets, it is possible to hunt ptarmigan and arctic hare as well as to trap fox. Fox, however, are not usually consumed as food but valued for their fur. It is sold, and is used for trim on the hoods of winter parkas, as protection from snow and wind. However, dog fur is preferred rather than fox, because the former does not accumulate frost or ice on the fur.

Like other Inuit groups throughout the arctic littoral, to survive as hunters the inhabitants of the Belcher Islands require an expert knowledge of the sea ice environment. This knowledge is reflected in the extensive terminology used to identify discrete kinds of conditions that characterize the continuously changing sea ice environment. To a qallunaaq, or other non-Inuit, many of these terms may seem esoteric, yet to an Inuk they constitute a necessary communication system to facilitate safe travel over the sea ice; and, the hunting of marine mammals and sea birds associated with this complex environment.

The most detailed study of Inuit knowledge and use of the sea ice environment was conducted in three Inupiat villages along the northwest coast of Alaska during 1964-66 (Nelson, 1969). In the report, Nelson (ibid) lists over 90 Alaskan Inupiat terms associated with the sea ice environment. Fifty of these terms describe sea ice topography, 19 refer to the age and thickness of the sea ice, and 15 other terms are used to describe sea ice movements. Nelson also emphasizes that, in light of the profound and comprehensive knowledge the Inupiat possess about the sea ice environment, his study is not exhaustive nor complete. In this regard, he (ibid: xxiv) states:

> during a field study focussed on actual behaviour, one becomes aware of the fact that a residence of many years in any one village would be required in order to do a really complete study, and even then the surface would only be scratched.

A further study of knowledge and use of the sea ice environment among the Alaskan Inupiat has been conducted by Lowenstein (1981), while the continued use and importance of the sea ice environment in regard to the eastern Canadian arctic Inuit has been detailed by Freeman (1984).

In the Belcher Islands, although sea ice appears along the coast in sheltered locations during the later part of ukiaksaq, it is not safe for travel until ukiaq. At this time, freeze up occurs, but travel on the sea ice is most dangerous due to the presence of new, thin ice. Unsafe ice is referred to as sikuaq, and it can be detected by its dark, or even black appearance. It has been suggested that this kind of sea ice appears black because the ice structure is saturated with water (Freeman, 1984: 76).

As the ice thickens and loses its water content, it turns grey in colour. When new ice turns grey in colour it is referred to as sikuliaq, and is known to be capable of bearing the weight of a snowmobile. From this time onwards, unsafe ice is still encountered but, generally, it can be passed over, providing the snowmobile and sled remain in motion. Detecting unsafe ice by colour alone, however, is not always possible, particularly if it has a recent cover of snow. Therefore, to test the safety of ice, a harpoon is thrust into its surface. If the harpoon penetrates the ice, it is safe. In the Belcher Islands, unsafe ice can occur anywhere, at any time, since the sea ice is continuously interacting with the wind, tides and underlying water currents which causes it to crack, open-up, move and, but not necessarily all the time, re-freeze. To hunt on the sea ice, it is essential to have a harpoon or unnaq, to test the ice.

During ukiaq most sea ice hunting takes place along the floe edge, sina, or at areas where open water occurs. When these areas of open water are known to reoccur at this or any other time during the sea ice period, they are referred to as ikirasuit (pl.) Ikirasuit occur within the landfast ice and are kept open by strong currents and tides that pass through narrow channels between certain islands. These small pools of open water are essential to the non-migratory eider duck population. When open water appears where the ice breaks or cracks, it is referred to as *immannisaq*. During freeze up when the ice is thin, or when new ice forms but has been broken by seal mammals or kept open by eider ducks, this kind of open water is referred to as *aummatauruq*. Finally, when open water occurs from the continuous movement of ice, it is referred to as *aulaniq*. At the floe edge, both ringed seal and bearded seal may be shot with rifles. These marine mammals, and the eider duck, may also be shot if they are located in an area of open water. Marine mammals float when killed at this time of the year, so when taken along the floe edge or at an area of open water, they are retrieved by either using a small wooden or aluminum boat that is carried on a sled, or by securing them with a carefully thrown hook and line. Knowledge about sea currents, wind patterns and tides all come into focus when harvesting marine mammals in the sea ice environment but, even among experienced hunters, it is not always possible to retrieve the animals or birds that are shot. For example, if a killed animal is pulled under the sea ice by the current, the opportunity to retrieve that particular animal is greatly diminished.

## UKIUK

During *ukiuk* the sea ice progressively thickens and reaches its maximum extent towards the end of March. Aside from polar bear hunting and fox trapping, and with the exception of ptarmigan hunting, the gathering of shellfish and a community reindeer hunt, most hunting takes place on the sea ice at seal breathing holes.

Eider ducks are also available, but their contribution to the subsistence diet declines during the winter period unless seals are not abundant and a substitute food is required. In such extenuating circumstances greater hunting emphasis is placed on eider ducks. The winter ecology of the local eider duck population is complex. According to the Islanders, the eider ducks must learn how to find open water in order to survive the winter. It is not always possible, however, and when open water is not abundant and cannot be found, it is common to find dead, frozen eider ducks on the sea ice; particularly immature eider ducks who are not as familiar with the distribution and occurrence of open water compared to the older ducks.

Furthermore, when the air temperature is very cold and little wind exists to facilitate surface currents on the open pools of water within the landfast ice, eiders become susceptible to freezing. When these kind of conditions occur, and if the open water in leads or along the floe edge have closed due to recent prevailing winds, the availability of open water for eider ducks is greatly diminished. For example, if the previous prevailing winds came from the south then the floe edge will close in the south region of the archipelago, but it will continue to shift with the tide.

Hunting seals at their breathing holes is well-described in the popular literature. The general name for seal breathing holes is alluit (pl.) although there are further classifications according to how the holes are made by the specific sea mammal, and by the age of the breathing hole (Freeman 1984:79). In the Belcher Islands, ringed seals are the primary animals hunted at breathing holes, although some bearded seals are harvested as well. Walrus also make breathing holes in the sea ice but they are rarely encountered as they prefer to inhabit areas of open water, which tend to be located well beyond the landfast ice and floe edge, namely around the Sleeper Islands.

The most frequent places to search for alluit is by travelling along cracks in the sea ice, or by checking patches of new ice where it is easy for seals to make and maintain breathing holes. At this time of the year, seal breathing holes are usually covered by a thin dome of ice, and a seal will maintain and use several holes. Hunting seals at their breathing holes is called nipattuq, and both rifles and harpoons are used depending upon the preferences and skill of the individual hunter. Although hunting seals at their breathing holes occurs throughout the entire archipelago, the most concentrated hunting in 1986 and in 1987 occurred in the landfast ice north of Flaherty Island and east of the North Belcher Islands.

During ukiuq, large numbers of polar bears migrate to the Belcher Islands. The main food of the polar bear is the ringed seal. Polar bears hunt ringed seals at their breathing holes since they are not able to catch seals by swimming in the open water. On rare occasions, polar bears may hunt white whales in small open pools of water upon which the whales depend for breathing when trapped within the sea ice. Although normally solitary animals, on these rare occasions, several polar bears may be attracted to these sites.

The polar bear is held in high esteem by the Belcher Island Inuit. It is considered by many as the 'mother of many animals' because of the large numbers of foxes, birds and ducks that feed on the seal carrion left by the polar bear. The polar bear is not only an expert hunter, but it is regarded as an expert in avoiding being hunted as well. Polar bears are known to avoid being hunted by travelling within the rough ice, while maintaining close proximity to the floe edge and open water where Inuit hunters cannot successfully pursue them.

Starting in March, ringed seals give birth to single pups. The _nunajait_ (pl.) are born in lairs situated in the sea ice. For the first two weeks or so, a seal pup will not normally leave the birth lair since it is susceptible to being hunted. These birth lairs are well protected because, by this time of the year, the sea ice is essentially covered by a thick, hard and uniform layer of wind packed snow. Although polar bears can detect these birth lairs by smell, _nunajait_ are well concealed and difficult to locate by human sight.

## DISCUSSION

The foregoing discussion has attempted to describe the way fish and wildlife contribute to the Inuit diet in the Belcher Islands, by examining some of the traditional food preferences and habits, and how they are produced as part of the seasonal round of subsistence activities. Another important aspect of the traditional food ways that could have been discussed include the way they are distributed and shared through various social institutions and networks, as has already been detailed elsewhere (Wenzel, 1986; Fienup-Riordan,1986). At present, however, an emphasis was placed on how the use of wild foods is associated with the kinds of harvesting and gathering activities according to the way the different seasons, natural events and ecological processes are reckoned by the Belcher Island Inuit.

In the industrial world, we tend to perceive the various activities that are part of the seasonal round according to certain labels. These activities are often labeled according to a work-leisure dichotomy, which is reflected in time allocation and time budget research. For example, in a time budget study of residents living in a metropolitan centre of eastern Canada (Elliot, Harvey and Procos, 1973: 16), the daily activities were labeled according to the following names:

1) regular paid work
2) related work - voluntary, housework, marketing (e.g. shopping), child care
3) personal care - eating, sleeping, health
4) study - training and skill development
5) leisure - recreation, entertainment, travel, social

In the Belcher Islands, all of the above activities also take place in the community, but they are not seen, or have the same meaning, as in industrial nation states. One of the reasons these activities are viewed differently, is because work and leisure are more integrated as part of the lifestyle, due to the way they overlap and fuse. In other words, work and leisure are ubiquitous activities that are part of the same process within the hunting way of life, whereby wildlife harvesting is not isolated from social obligations and responsibilities to the community, which includes the relations between people, wildlife and the environment. As a result of these responsibilities and obligations to the community, the dichotomy between work and leisure is essentially irrelevant to the subsistence hunting way of life, because the various activities are part of the same social process. For this reason, therefore, we need to cease taking industrial ideas and labels about time, work and leisure for granted, which will require attention to how these activities are part of the lifestyle, rather than viewing them as separate from peoples lives.

# CHAPTER V

# THE POLITICAL ECONOMY OF ANIMAL PROTECTION

The Belcher Island Inuit are only one of several distinct Inuit communities that continue to depend upon the harvesting of wildlife in the particular region they each use and occupy. There are also other indigenous communities that continue to depend upon harvesting wildlife, namely the many different groups of Indian and Metis peoples, who occupy the boreal and sub-arctic regions. For example, of the 35 permanent settlements located in the Hudson-James Bay, Hudson Strait and Foxe Basin ecumene, all but 2 are Native (Berkes and Freeman, 1986: 427). Twenty of the remaining settlements in this ecumene are located above treeline, while the other 13 Cree Indian communities are either situated where the taiga and tundra meet, such as at Kuujuurapik on the east coast of Hudson Bay (Figure 1), or south of the treeline. Yet, despite the rich, diverse cultural ecological circumstances and adaptations amongst these distinct indigenous communities, they all continue to depend upon a hunting way of life that now takes place within what has become known as the northern industrial frontier.

Over the last fifty years, assessments of the northern Native hunting way of life have tended to reflect the changing interests and aspirations of the dominant, encroaching industrial society. Many of these assessments claim to be derived from the modern sciences; however, upon careful analysis these scientific assessments are inseparable from, and deeply rooted within, western industrial culture. In this context, therefore, any analysis of the continued role and meaning of wildlife harvesting by northern Native groups must be sensitive to the inherent limitations and predispositions that come from living within a predominantly advanced society.

In this chapter, the intent is to describe and examine how certain ideas about northern Native wildlife harvesting tend to reflect the ways in which time, work and leisure are socially organized and conceived within western industrial culture, as opposed to a disciplined, systematic inquiry of the particular phenomena they purport to explain.

## SOME HISTORICAL AND THEORETICAL FACTORS

The ways in which northern Native hunting peoples have been stereotyped, and become rationalizations to serve the interests of the dominant society have evolved over several centuries. To list and explain these stereotypes by reducing them to one or two variables would not do justice to the complex and sophisticated ways in which images and myths about hunting peoples have been socially constructed and nurtured in western industrial culture, ever since exploration and colonization of the New World began. In other words, they have originated since the first European explorers embarked on their exciting and precarious journeys into unknown waters and lands that turned out to be already inhabited by Natives. As Hugh Brody (1981:49) suggests:

> travellers set off on terrifying journeys into an unknown that was already peopled, in the popular imagination of the day, with all kinds of fantastic monsters. Some of these adventurers

> returned with wondrous accounts of the lands and savages they had encountered. These accounts entered the political and legal arguments of the day, and played their part in the rationalization by European powers of their various claims to new found lands.

Throughout the colonial history of the north, the Native economy has tended to reflect the changing interests and aspirations of the dominant industrial society. In the mid-1950s, anthropologists working amongst northern Natives suggested that the hunting way of life had no future (Van Stone, 1963), which facilitated widespread government intervention in the form of relocation, sedentarization, education and health programs. Many of these programs continued into the 1960s and 1970s.

Starting in the late 1960s, however, the industrial frontier moved northward. This was characterized by the search for, and planned development of, mineral and energy resources. During the past two decades, those who advocated the large-scale development of non-renewable resources, hydro-electricity and water diversion schemes tended to ignore, or underestimate, the importance of the subsistence economy to the Native communities in the region (Berger, 1977:100-109). Perhaps, one of the best ways to illustrate how the northern hunting way of life was, and continues to be, underestimated is to quote the following editorial that appeared in the Northern Miner (as quoted in Tester, 1981:191):

> Preliminary exploration has indicated that this area is rich in uranium and many other minerals and it is unthinkable that development should be stopped in order to preserve such a rudimentary way of life as to require hunting for one's next meal. Surely, we have all progressed beyond that, especially in Canada. All too often we have the southern do-gooders and

> environmentalists wanting to keep these people in their basic lifestyles as a sort of quaint museum-piece rather than encouraging them to become part of the 20th century.

Today, there is no doubt that similar attitudes prevail amongst industrial people and government officials. In the 1980s, however, a new attitude towards the hunting way of life has also emerged in association with the growing number of urban-based, non-governmental organizations that protest against the continued hunting of wildlife by advocating an animal protection policy for the use and management of animals in general, and for wildlife in particular. Although this kind of protest tends to assume that the issue is a moral debate, few of its advocates seem to acknowledge that the shift towards animal protection is closely associated with the overall manner in which industrial society has developed an appreciation of, and affection for, wilderness, all of which is inseparable from the ways in which mass participation in outdoor recreation activities have escalated since the end of World War II. According to Carls (1980:159), "wilderness, like public art galleries, opera houses, and museums, has obviously become a cultural/environmental amenity to be valued though not necessarily used". Consequently, since the arctic is now regarded as one of the largest and most attractive areas of remaining wilderness in the world, the hunting way of life has become, in the words of Peter Usher (1986:37):

> a fish bowl in which the behaviour of the local inhabitants with respect to wildlife is unstintingly scrutinized by the increasingly curious and demanding population of the western industrial nations. The North has become another battleground for southern interests and ideologies.

In analyzing the hostile protest that has been led by diverse range of animal protection groups against the northern indigenous hunting way of life, it is apparent that the colonial context and attitudes of this social and political environmental movement have been overlooked.

One reason why the colonial context of the animal protection movèment in relation to northern indigenous systems of wildlife use and management tend to be ignored is because the ideas and actions of this movement are perceived and occur within the dominant, urban populated centers of advanced industrial countries. Yet, the very fact that this movement represents the interests and attitudes of industrial, metropolitan populations while excluding the participation of indigenous peoples in the environmental decision-making and public policy process itself, is precisely why it can be only understood in a colonial context. In short, a society such as the Belcher Island Inuit "is colonial to the extent that major decisions affecting it are made outside of it" (Dacks, 1982:208), and this is clearly the relationship the animal protection movement continues to perpetuate with northern indigenous communities.

The colonial attitudes and social reality that the animal protection movement perpetuate towards the North are not just mere theoretical interests of social scientists. For example, the recent lobby that successfully led to a ban on the import of seal pelts by the European Economic Community in 1982, as well as the current campaign to end indigenous involvement in the fur trade by focussing on the identification of wild animals caught by leg-hold traps reflect how small, rural communities living on the periphery of industrial societies tend to evaluated and assessed by the economic and leisure interests of urban populations with wholely self-interested, metropolitan values in mind.

Although the animal protection movement is critical and objects to wildlife management according to the conventional, scientific approach taken by professional wildlife biologists and resource managers, both of these groups tend to perceive and explain the evolution of northern indigenous hunting within one of two paradigms stemming from the same world view. The first refers to a prey-predator theory which seeks to explain hunting behaviour in a biological model. The second refers to a widely accepted evolutionary theory of social development which seeks to explain hunting in an acculturation and modernization context. Despite the apparent foundation of these two paradigms in the biological sciences, both are deeply rooted in the ideology and cultural organization of time, work and leisure in western industrial society. According to Peter Usher (1981:57), these paradigms are so widely held "that most people who use them feel no need to justify or explain. They have become, in effect, conventional wisdom".

## PREY-PREDATOR MODEL

Hunting and gathering societies are often referred to as "pre-industrial or primitive" since they are thought to be the simplest type of human society (see, for example, Guthrie, 1970). Because "their way of life has historically been regarded as a precarious and arduous struggle for existence" (Lee, 1969:30), many believe that these societies never had any leisure since all their time was necessarily devoted to a quest for food. Both Boas (1940:285) and Childe (1951) consider leisure a requisite for cultural development, but argued that since hunters and gatherers never had any leisure they remained essentially in a culturally uninformed state. Consequently, the behaviour of hunters and gatherers is primarily conceived in a biological prey-predator relationship.

Within this biological view, human hunters are seen as being at the top of the food chain, which was kept in balance historically through natural laws and the use of simple technology. As soon as primitive hunters adopt modern technology through cultural contact with industrial societies, however, the prey-predator relationships are thought to be no longer in balance since natural laws are eliminated. With no natural limits on hunting, and no acknowledgement of indigenous cultural mechanisms for conservation and management, the use of modern technology eventually results in depletion of the wildlife that the primitive hunters depend upon (Usher, 1981).

Although this mechanistic and biologically deterministic theory may appear overly simple, it is surprising to note just how often both animal protection advocates and professional wildlife managers tend to call upon these beliefs in order to justify both claims of an apparent lack of respect that indigenous people have for wildlife and the need to regulate indigenous wildlife hunting to protect animals from over depletion and a perceived sense of extinction. This view is perhaps most strongly asserted by Mitchell and Reeves (1980:702) who state:

> Once modern medicine and modern hunting devices are introduced to a subsistence culture, the possibility of resource over-

> exploitation, with no resultant control of the human population (e.g. starvation) arises. Human communities can live off the land only so long as their own numbers are kept in check: there is a feedback cycle that must come into play with sufficient force to prevent irreversible damage to the resource base. Alternatively, a management regime, with quotas, seasonal closures, year restrictions, and other effort limitations can be instituted to ensure rational and sustained exploitation for subsistence purposes.

An important theoretical justification for the prey-predator model of indigenous hunting stems from a widely accepted hypothesis that has become known as the Pleistocene Overkill Theory. As originally popularized by Paul Martin (1979), the predatory excesses of human hunters are thought to have resulted in worldwide faunal extinctions during the Pleistocene Era - a time when human hunters are believed to have appeared on the boreal scene.

Several recent reviews of renewable resource management in northern Canada and Alaska have adopted the Pleistocene Overkill hypothesis as a biological model to explain contemporary indigenous hunting behaviour. Macpherson (1980:103), who accepts Martin's overkill hypothesis as scientific fact, states:

> The immigrants from Asia, via Beringia, were hunters and it has been shown (Martin, 1967) that their advent extended a process which had long been current in the Old World - the depletion of the varied large mammal faunas of the Pleistocene era. Canada's present game animals are the survivors of this process.

While accepting Martin's (1979) hypothesis without question, Macpherson continues by concluding:

> There seems no evidence, then, that wildlife was purposefully managed by Amerindian populations in northern Canada at the

> time of contact. Instead, we may conjecture that the impact of hunting on wildlife stocks was limited only by the low technological level of the hunters and the fact that their populations were small and insecure (ibid:104).

Several other biologists (Livingston, 1973) have accepted the same view whereby human hunting populations are considered as only another predator within the food web. Thus, with few cultural characteristics, particularly in regard to wildlife conservation and management, Theberge (1980:281) writes "population limits were established by the immediate environment, no different in that regard from the populations of all other species that are interwoven as threads in the fabric of northern ecosystems".

One of the problems in accepting Martin's hypothesis as reality is that the view must necessarily be scientific. However, in light of some of the questions being raised in archaeology (Butzer, 1971), human biology (Ammerman, 1975) and human ecology (Webster and Webster, 1984), there is no distinct support. One of the major concerns stems from the problem of identifying and interpreting the massive number of changing variables that must be built into the models in order to reconstruct environmental and human-megafaunal interactions during the Pleistocene era. In this regard, Kranz (1970) suggests Martin's (1979) overkill hypothesis "is not only impossible but disturbing".

Other investigations, although more concerned with prehistoric cultural and environmental changes, caution similar warnings (Barry, Arundale, Andrews, Bradley and Nichols, 1977). In one study using archival and ethnographic field research in the Keewatin area as a basis for understanding the influence of European contact, Burch (1977) describes how extermination of musk oxen from the introduction of firearms and trading is quite misleading.

Although only a limited number of reports is reviewed here, clearly, as an organized body of scientific research there are many problems with the pleistocene overkill hypothesis as well as with its extension into more recent situations. Some of the current problems in the application of the overkill hypothesis to wildlife use in northern Canada that stem from viewing human hunting populations in a biological prey-predator relationship have been detailed elsewhere (Freeman, 1985).

## THE EVOLUTIONARY-ACCULTURATION MODEL

A second source of ideas and beliefs about human hunting societies is a widely accepted evolutionary theory of social development. In this model, social development is associated with theories of cultural complexity and modernization whereby indigenous societies such as, in northern Canada, are viewed as an early or primitive stage of development (Bernstein, 1970).

Cultural evolution, which is often taken as a measure of cultural complexity (Chick, 1986), is seen primarily as a process in which simple hunting and gathering subsistence societies adapt technologically to more reliable economic systems of food production such as agriculture and, more recently, modern industrial production. Arguably, some may contend that "civilization" is now entering a post-industrial or leisure society, or further yet, a space age or electronic era. Nevertheless, within this evolutionary-acculturation model, technological change is believed to invoke more complex systems of economic production (e.g. specialization) and human societies are freed from the necessity to hunt for food. Thus, in the North, for example, as the small indigenous hunting societies come into contact with large industrial societies they become acculturated and incorporated into modern nation states.

Although considerably more detail could be added to the previous discussion, the underlying assumption of the evolutionary-acculturation model is that northern indigenous hunting societies and modern industrial societies are essentially homogeneous. Whatever differences that do exist between these two types of societies, they are regarded as a transitory state; and hence, the lifestyle that depends on hunting wildlife is seen in one of two ways.

In the first case, animal protection advocates tend to assume that through acculturation hunting has become a form of work that is primarily an economic activity undertaken to maximize monetary profit. In the second case, due to the perceived availability of other economic opportunities (i.e. wage labour) and alternative vegetable foods that can be imported from the South, hunting is no longer viewed as a necessity, and when it occurs it is for recreational or leisure purposes only. Consequently, in the eyes of many animal protectionists, there is no difference between aboriginal hunters and sport hunters.

Based on written interviews with leaders of major animal rights organizations in Canada, George Wenzel (1985) suggests there are three, interrelated objections to northern indigenous wildlife harvesting.

Wenzel refers to these interrelated objections as (1) complicity, (2) change, and (3) sameness.

According to the complicity argument, animal rights advocates suggest that, although the Inuit may have been coerced into the fur trade, they are now aligned with the fur industry, either for self-interest or through manipulation by the fur industry, itself. In regard to the seal boycott, for example, native people are seen as doing "white man's" work, and have become one of the enemies of wildlife. The roots of this argument are found in the work of Martin (1978), which has been essentially reiterated by Regan (1982) in the sense that participation in the fur trade was the coup de grace for traditional indigenous cultures.

From the animal rights perspective, the traditional reverence for, and conservation of, wildlife by indigenous people has now been replaced by commercialism. No longer do the Inuit care about wildlife, because hunting is just an economic activity motivated to acquire and accumulate consumer goods. In this context, self-regulatory behaviour that could have existed is no longer present because the objective of hunting is to merely acquire cash and purchase imported consumer goods.

The second argument, which is closely related to the former, is that Inuit and other indigenous societies have changed so much that there is no connection with the past. In other words, the adoption and reliance upon modern technology is seen as an indicator of acculturation, and modern technology ruins nature and must be opposed on environmental grounds, no matter who uses it. As George Wenzel (1985) observes: the use of technology removes hunting from its traditional orientation, and a reliance upon it has led to the development of non-self-sustaining societies. The main theme of this argument is that modern technology will enable a hunting society to outstrip the wildlife resources they depend upon, and the presence of modern artifacts is seen as evidence that no connection between the past and present exists within indigenous hunting societies.

The third argument that animal rightists advocate in order to legitimate their views of subsistence is that Inuit society is no different from Euro-Canadian and other modern industrial states, either in the values it holds, or by virtue of membership within the state. In this context, hunting is for primarily monetary reward, implying that the Inuit will behave like any other group - to maximize economic profit. Consequently, the Inuit are seen to have become acculturated, and to have developed the same material desires and consumptive lifestyle that exists in North America - and in all instances this leads human behaviour to act in excess.

## SOCIAL AND POLITICAL ECONOMIC CONSIDERATIONS

Members of animal rights groups usually identify themselves as part of the environmental movement. Since the 1960s, public interest and participation in the apparent environmental movement has become highly institutionalized, which is expressed in, and represented by the widespread growth of the number and size of voluntary, non-governmental organizations (NGO's). Due to the diversity and number of issue-oriented groups that have evolved there is considerable variation between groups, although the vast majority of voluntary associations that comprise the environmental movement are primarily located in large urban centers of industrial societies.

In the North American situation, a basic distinction that has historically characterized the movement is between the preservationists and the utilitarians. On the one hand, the preservationists are interested in "keeping the natural environment free from alteration by man", while on the other hand the utilitarians believe that the natural environment should be "used wisely, governed carefully, and renewed properly" (Sills, 1975:2-3). According to the anthropologist John W. Bennett, the differences between preservationists and utilitarians constitute an important problem that cannot be overlooked:

> these groups are often as much opposed to each other as the critics may be to one or more of them. If this is true, then the "movement" is some kind of temporary historical coalescence of warring interests which will, and already has, fallen apart. The "environmentalists" represented by the space planners and urban dreamers are the exact opposite of the "environmentalists" represented by the Sierra Club - it is the difference between people who want to remake the natural world in a human image of some kind and those who want to keep man out of it. This partial union, if there is any real union, of opposites is the crux of the whole problem, it seems to me. The critics are not really criticizing the "movement", they are criticizing some facet, some component, which they happen not to like for one reason or another. (as quoted in Sills, 1975:3)

A further distinction within the movement seems to exist between the voluntary associations, and what Morrison et al (1972:267) refer to as "institutional movement organizations". In this view, the preservationists tend to join and network amongst various NGO's such as wilderness societies and animal rights groups, while the utilitarians tend to consist of institutionalized agencies such as professional associations of wildlife biologists, planners and managers, for example. Consequently, although all preservationists and animal rights groups are part of the environmental movement, not all members within the environmental movement would regard themselves as preservationists or animal rights advocates.

The composition and social organization of preservation-oriented NGO's has received considerable attention in North America. Based on the studies that have examined wilderness societies (e.g. Harry et al, 1969) and animal rights groups (e.g. Shaw, 1977), they tend to consist primarily of upper-middle class, university educated people who reside in urban centers and are employed in professional occupations (Faich and Gale, 1971). There is some variation, however, since some groups are primarily coalitions of university or college students. To the members of animal rights groups, these demographic characteristics appear to be regarded as an important means of identity, credibility and legitimacy for the movement itself. For example, in a recent position paper on the animal rights view, Steven Best (1986:209) asserts, "in truth, the animal rights movement is evidence of a deep concern held by the most highly educated segment of our society about the relationship between man and animals, in particular, and the environment in general". A similar view is described at length by Guthrie (1970:722), who particularly emphasizes this proprietary interest based on the separation of work and leisure into distinct categories:

> It is the city dweller, divorced from a direct dependence upon the land, who has taken the lead in conserving our wildlife and natural areas. Urban citizens can afford to view the eagle and

> coyote as beautiful creatures, not economic liabilities, and to view land they do not own or have an economic interest in as worthy of preservation in a natural state ... To be sure, this attitude of concern stems more from self-interest in recreational use of the environment and in the quality of the air and water that we use than from any true respect for the rights of nonhuman organisms.

## VIEWS AND VALUES OF WILDLIFE

The views and values of wildlife within the animal rights perspective constitutes a unique culture. Although there is considerable variability regarding the meaning of animal rights (e.g. Miller and Williams, 1983), most would agree that animals in general and wildlife, in particular, are intrinsic entities and/ or beings worthy of preservation for their own sake - through protection of the environment and the individuals within each species that inhabit the environment. One of the ways in which these preservationist values are ideally realized, is through extending human rights to animals, and by protecting them in natural and wilderness areas. In this particular context, the underlying belief is that wildlife are perceived and experienced in the context of a non-consumptive recreation activity during leisure time. In other words, wildlife are culturally segregated in time and space, as a dichotomy to the values and attitudes concerning work, which is almost invariably defined as economic activity directed towards profit maximization.

The non-consumptive ways in which wildlife are experienced during leisure time are expressed in many forms. First, there are those type of experiences that value wildlife while driving for pleasure, or while hiking, boating or cross-country skiing in natural or wilderness places. In these types of social settings, wildlife are enjoyed through nature contemplation and study, photography and painting. The second set of wildlife-oriented leisure time activities are what Usher (1986) refers to as "existence values". In these type of experiences people may not want to, or have, the opportunity to view wildlife in its natural habitat, but derive pleasure from wildlife literature and televised nature programs and value the knowledge of its existence. In these type of experiences, wildlife and wilderness are often seen and valued as superior, and in opposition to forms of civilization, industry and urban life (Usher, 1986:58-60).

Most wilderness and animal rights groups, as reflected in their attitudes towards preservation or conservation of the environment, tend to oppose consumptive (e.g. sports hunting and fishing) and mechanized (e.g. snowmobiling and trail biking) outdoor recreation activities (Jackson, 1987). Indeed, from the animal rights view, sports hunting and wildlife management are often seen as a system in which wildlife populations and habitats are manipulated to create and maintain an optimum, sustainable surplus for sports hunters to kill during their leisure time (Baker, 1985). According to Decker and Brown (1987:600), this type of system "does not respect the right to life of individual animals in a population". Consequently, animal rights advocates argue that the recreational values of sports hunting, such as communion with nature, exercise and so on, can be substituted with non-consumptive, appreciative recreational activities.

For the sake of clarity, it should be emphasized that there is no clear distinction between consumptive and non-consumptive wildlife experiences. For example, non-consumptive wildlife experiences sustained over the same place through intensive use can result in degradation and loss of habitat. Moreover, in the case of recreational whale watching for example, which is now a multi-million dollar growth industry sometimes results in disturbance to migration routes, causes accidental mortality (Boswall, 1982; James, 1985), harassment and other adverse impacts upon whales (Tilt, 1987). A further problem concerns the recreational use of wildlife held in captivity at marine aquariums and zoos. Although these animals are not used in the consumptive context attributed to sports hunting or commercial uses, Barstow (1986) refers to this type of wildlife use as "low consumptive" recreation since the animals are "only" separated and kept in captivity from their natural environment.

## SUMMARY

Even from this brief overview of how subsistence is perceived by the animal protection movement, it is clear that these perceptions of the value and use of wildlife are a reflection of how work and leisure are organized in industrial society. The animal protection movement is characteristic of the way in which work and leisure have become socially organized into two particularistic and opposing institutions of human action and values in the lifestyles of advanced, modern industrial nation states. In this system, wildlife are valued primarily as intrinsic beings that are to be preserved for their own sake, and are to be enjoyed by humans during leisure time. Interference with the interests of wildlife, as they themselves experience the quality of life, is seen either as an economic activity that occurs during work time, or as a consumptive form of recreation that occurs during leisure time. Because no other possibilities of life are conceived to exist outside this simple dichotomy of human behaviour in accordance with clock time, indigenous ideas about wildlife, based on different notions of time, work and leisure within a mixed economy, are essentially seen as irrelevant due to the ethnocentric attitudes and sense of proprietorship the animal movement groups have come to espouse. As recently expressed in a letter to Animals Agenda (March 1986), one of the leading journals of the animal rights movement:

> these traditional ways of life (should be) shown for what they really are -- anachronisms blocking progress toward more humane standards ... the war on nature must be slowed down.

# CHAPTER VI

# DISCUSSION AND CONCLUSION

In this study I have attempted to describe some of the ways in which an Inuit community in the eastern Canadian arctic continues to depend upon the environment that it inhabits, and to examine the implications of this dependence in relation to certain issues that have been raised by the development of an animal protection movement towards wildlife management. The particular Inuit community that was briefly described and examined from a human ecological perspective inhabits the Belcher Islands, in southeast Hudson Bay.

One of the major themes that emerged from both the field study and the review of the related literature was that the social organization and meaning of time, work and leisure are intimately related to the value, use and management of wildlife in particular, and in relation to the use and management of the environment in general. Thus, a major objective of this study has been to demonstrate that a better knowledge of the social organization and meaning of time, work and leisure would be useful in understanding how human actions, attitudes and values are associated with the use and perception of wildlife management by indigenous peoples. Within this overall theme, the study has focussed on three, interrelated objectives.

First, I have tried to describe how wildlife use and management tend to be conceived and valued according to the social organization and meaning of time, work and leisure as a characteristic of the modern industrial state, by examining the way these values and ideas about wildlife use and management are expressed and reflected by the recent emergence of an animal protection movement.

In this regard, a longstanding belief in western culture is that work and leisure have evolved into two distinct institutions of human action and values, which are temporally segregated and often held in opposition to each other. These ideas about work and leisure as a dichotomy have been expressed since the early literature of Greek civilization, and they continue to have a central role in formulating how work and leisure are conceived and treated in the modern sciences (e.g. Kelly, 1972). As such, it is worth noting Serena Arnold (1980:5) who states:

> Almost everyone believes that he or she has an adequate understanding of leisure, recreation and play. Most people have a ready definition and will argue that leisure is time off the job, time free from the requirements of life and time in which they may choose to do what they want. Recreation will be reported as closely allied with sports and games, and if you ask people to identify their recreations, more often than not you'll be provided with the name of an activity perceived as an escape from routine.

In regard to work, in industrial society it has primarily become associated with paid employment. If someone is at "work" they have a job, and if you ask someone what they do, the answer will likely refer to their type of employment, occupation or particular career (Barrie, 1986). For those who do not have a job, it is as if they have no identity, and face the social stigma of being unemployed. The emphasis upon work in the form of a job, which is performed primarily for an employer who pays wages, often means that unpaid activities, as useful as they may be, do not count as work. As Ross and Usher (1986) have discussed, one of the most important ways unpaid work is not recognized is reflected by the manner economists only refer to work that can be measured by monetary value ( e.g. as a contribution to the GNP). They have described some of the industrial biases associated with the meaning of work by suggesting:

> ... the terms 'employment' and 'work' in industrial societies have become over time almost synonymous in their usage. If people are not employed they are not working. The most galling question that can be asked of a housewife is "do you work"--meaning are you employed? Similarly, many Native people in the North who hunt, fish, cut wood, and repair their own engines would be classified in a typical government employment survey as unemployed, even though they work very hard and produce things of essential value. Although the relationship is weakening, work is still confused with employment and, more specifically, paid employment (Ross and Usher, 1986:113).

At the same time, people fortunate to have a job in the industrial societies are often dissatisfied with their work. This sense of dissatisfaction is expressed in relation to a complex of factors, such as the lack of responsibility frequently associated with the repetitive structure and meaningless activities that characterize many job-related tasks; and other factors such as the emphasis placed on occupational specialization within formal, large-scale bureaucratic organizations. For these reasons, amongst others, many people in advanced industrial society now see recreational activities that take place during their leisure time as a major focus of their lives, which is separated from, and often in opposition to, the behaviors, attitudes and values normally associated with work. Thus, in reference to the animal protection movement, wildlife are primarily a leisure phenomenon that have aesthetic, appreciative and non-consumptive value in opposition to the values that characterize the meaning of work, as they have evolved in western, industrial culture.

In advanced industrial nation states wildlife are primarily a leisure phenomenon, and as has been pointed out elsewhere, those people in industrial society who value wildlife for leisure purposes enjoy a much higher socio-economic standing compared to northern Native populations (Usher, 1986). It should not be surprising, therefore, that wildlife management plans in industrial nation states are normally oriented towards the recreational use of wildlife, despite the way in which these management plans reflect economic notions about maximum, or optimum sustainable use.

The second objective of this study attempted to examine some of the problems that are involved with trying to stereotype the Inuit use and value of wildlife according to the meaning and pattern of time, work and leisure as it is socially organized and conceived in advanced industrial states; and according to how time, work and leisure is conventionally practiced and treated in the modern sciences as well. This objective was considered important in view of the tendency to assume that wildlife use and values amongst the Inuit, or other northern Native community, is culturally homogeneous to the use and value of wildlife in western industrial culture.

For over a decade now, the animal protection movement has held a hostile attitude towards the northern Native hunting way of life. Much of this attitude, as expressed in their views of northern Native wildlife harvesting, has been based on the manner in which it seems to be either a form of commercial economic activity, or a recreational activity, due to the rapid pace of change that is occurring as northern hunting peoples have become encapsulated within modern nation states and international economic systems.

When northern Native wildlife harvesting is referred to as just an economic activity, it is frequently pointed out that the primary goal is to maximize human profit, which inevitably leads to the extinction of wildlife populations, and contributes to the wanton destruction of nature. In contrast, because new economic opportunities have displaced the economic role of wildlife harvesting, it has also become convenient to refer to Native hunting as a sport, or leisure diversion. In either case, the hunting way of life is seen as a anachronistic activity that is no longer, or soon will no longer be, a necessary part of northern Native lifestyles. These views are by no means limited to the animal protection movement, but closely follow a widely held belief of the dominant society that, in the development of industrial frontiers, the natural skills, knowledge and resources of traditional communities are no longer viable in the modern world (Mathews, 1976).

In the social and biological sciences, the way time, work and leisure tend to be defined almost invariably assumes and follows the meaning of work and leisure according to how they are patterned around the social organization of time within an advanced industrial nation state. Within this way of knowing and being in the world, work and leisure are seen as two polarized sets of human actions and values that are segregated in time and space. This accounts, in part, for the countless number of time allocation studies that have been conducted among industrial societies (Szalai, 1972), subsistence societies (Hill, et al., 1985), or between different cultures in relation to changing technology and social complexity (Minge-Klevana, 1980).

Almost invariably, these studies view leisure as the kind of activities people participate in during the "residual" time left over after work. It has been suggested, however, that all these kind of studies tell us is that a researcher can arbitrarily divide up the amount of time people spend engaged in work and non-work (or leisure) activities, without making reference to the personal and social meaning of the particular activities, let alone some of the "obtrusive" methodological difficulties that are associated with the measurement of time use (see, Rotenberg, 1981). According to Rotenberg (ibid:87), time allocation cannot handle the complex problem of timing, the coordination of, and potential conflict between the sequences in the community.

A further problem, however, is that work and leisure are not necessarily segregated, isolated and compartmentalized into two separate institutions in subsistence societies. Consequently, time allocation studies of a hunting people always face the danger of constructing a social reality that may have relevance to western industrial culture, but does not impart a sensitivity towards the mode of decision-making and behaviors of the human populations they purport to explain, and predict. For this particular reason, a strictly biological approach to understanding hunting behaviour whereby humans are merely another animal predator in the food web, that "spend more time in activities that give them the highest payoffs" (Hill et.al., 1985:45), needs to be treated with caution. Such statements, despite their apparent foundation in the biological sciences, are deeply rooted in western culture, as reflected in the way that human behavior is directed towards profit maximization in industrial societies.

From a human ecological perspective, although bioenergetic studies, such as time allocation and input- output analyses, have made important contributions to understanding human adaptation (and problems of human adaptation to the environment), social scientists now agree that a materialistic approach has limited the explanatory and predictive capacity to understand human behaviour, and the management of human behaviour in the environment. Two of the main reasons for the limited utility of a strictly materialist, or bioenergetic approach stem from the rapid pace of change which is occurring in all parts of the world, and because physical resources do not have standard value across all human groups. A similar statement applies to human activities as well, which accounts for the way in which the same activity may have different meanings, both within the same group, between different groups, and from time to time, for any individual or group.

The third objective of the study, which closely relates to the second, was to examine certain aspects of wildlife use according to the way hunting and fishing is practiced and valued by the Inuit, by describing some of the social processes and the manner in which time is reckoned in association with the environment. This was based on some observations of the traditional food ways and seasonal round of activities that are a characteristic of the hunting and fishing way of life in the Belcher Islands situation.

Among the eastern arctic Inuit the Belcher Island Inuit are known as the Qikitarmiut, or since concentrated at a permanent settlement called Sanikiluaq, they also may be referred to as the Sanikiluamiut.

Similarly, just as the Inuit who have become concentrated around Inukjuurak may be referred to as the Inukjuuramiut, the same can be said of the Iqaluimiut, who now reside in Iqaluit (formally Frobisher Bay), and so on for the Inuit communities throughout the eastern arctic (e.g. the Akulivimiut of Akulivik).

The Islanders are one of two Inuit communities that permanently inhabit the off-shore islands in Hudson Bay. The other off-shore community is situated further north, at Southampton Island (i.e. the, Salliimiut at Salliivik). Although the remainder of the Inuit communities in this variable and diverse region each occupy places along the Hudson Bay, Hudson Strait and Ungava littoral, they all continue to depend primarily upon the marine environment. This maritime adaptation among the Inuit throughout the eastern arctic ecumene reflects the biologically more productive marine environment compared to northern terrestrial and freshwater ecosystems[1]. One exception to this maritime adaptation amongst the Inuit, however, concerns the Inuit who occupy the "barren lands", northwest of Hudson Bay. They have often been referred to as the "caribou Inuit", and depend upon the actual animal that bears their name (Hoffman,1976; Welland, 1976). In the Belcher Islands, although the terrestrial environment has played a greater role in the subsistence diet following the introduction and growth of a reindeer herd since 1978, it is the marine environment that provides the most important wild foods upon which the human inhabitants of this small archipelago continue to depend.

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[1]. The same can be said, though to a lesser extent, of the Chipewyan and Cree-Indian people who inhabit coastal or inland territories, below the tree line, within the Hudson and James Bay drainage basin (Berkes and Freeman,1986; Berkes and Farkas,1978).

Despite the rapid and profound social and cultural changes that have recently occurred amongst the Islanders, including new economic, political and administrative arrangements, one aspect that continues to remain traditional is the attachment and dependence upon the hunting way of life.

Today, few who tend to see wildlife harvesting as a leisure diversion can deny the important contribution of wild foods to the Inuit diet, and health complex. However, not only is harvesting fish and wildlife central to the community economy, but perhaps more importantly, it also provides meaning to the traditional values of the community, particularly in the face of powerful disruptions that originate and derive their source of legitimacy from outside forces of change.

It was suggested that although the fish and wildlife do have economic value, at the same time, the various activities that fall under the label of hunting are not separate, or isolated from, other important social institutions, values and belief systems, particularly in relation to the traditional food ways. In Chapter IV of this study I have tried to describe certain aspects of the traditional food ways in the Belcher Islands, by examining some of the dietary preferences and habits that are associated with the procurement, distribution and consumption of wild foods. In short, the manner in which wild food is used is part of comprehensive approach and outlook to life.

A further aspect to the traditional food ways of the community that was described and examined is the seasonal round of subsistence activities, which involved consideration of the way time is reckoned in the hunting and fishing way of life. Despite the adoption of clock time, the seasonal round is the most important manner in which time is experienced, viewed, and reckoned in association with the environment a hunting people uses and occupies. Indeed, not only is a flexible and patient attitude towards an uncertain future required, due to constant changing ecological circumstances, but knowledge of these ecological processes is also necessary in order to secure a dependable supply of food in a safe fashion. Furthermore, because these foods are procured according to need, the subsequent complex of human activities is not dictated according to the marketplace, but relate more to the reproduction of the social relations, and the underlying beliefs, values and knowledge that give meaning and identity to the community, which includes the relations not just between people, but between people, the wildlife, and the environment that sustains them as well.

In light of the above considerations, those who insist upon viewing northern Native wildlife hunting and fishing within a work-leisure dichotomy not only face the danger of making ethnocentric evaluations that have more historical primacy within western industrial culture; they also face the danger of phrasing questions, and seeking answers to those questions, within a reductionist manner. Thus, in regard to questions about socio-economic and cultural change in the north, and the continued role, meaning and practice of wildlife hunting and fishing amongst the Native communities, I would assert, and with considerable conviction, that solutions to the northern human ecological situation will only begin to be realized when we cease to take western industrial notions about time, work and leisure as axiomatic for these indigenous communities.

There is, however, a further reason why we should evaluate the way work and leisure is seen as a dichotomy. For example, some of the current research now suggests that even in industrial society, work and leisure may not be as distinct as was formally believed (Kelly, 1987; Wimbush and Talbot, 1988). As a result, some social scientists now argue that, rather than viewing work and leisure as separate aspects of peoples lives according to how they appear as objects within a clock and wage time frame; they are a process in peoples lives that encompass a whole range of experiences. In this context, perhaps these experiences may be represented on a continuum from strongly polarized on the one hand, while on the other they may overlap and fuse as part of the lifestyle. It has been suggested that people should have the right to label these experiences and activities according to how they define them, in relationship to the social obligations and responsibilities that contribute to, and are part of, their lifestyle (Bella, 1986).

From the indigenous point of view, these social obligations and responsibilities include the relationships between people, wildlife and nature (Fiet, 1988:77-78). In this regard, therefore, industrial society has much to learn from indigenous communities, rather than merely viewing them as an "exotic historical footnote" (Posey, 1983: 226).

Finally, one of the policy implications that has become apparent with the recent shift towards a preoccupation with the morality of wildlife hunting for subsistence purposes, is that it has drawn attention away from a concern with fish and wildlife habitats per se. At the same time, however, it does not seem practical to manage wildlife by protecting them from those human interests who intrinsically depend upon their survival for food, if there is insufficient habitat to sustain the wildlife in the first place. For example, it has become popular to develop artificial insemination and breeding programs for animals kept in captivity at zoos, in order to reintroduce them into the wild. Unfortunately, however, despite the intentions of these programs, they do not address the reasons why the particular species are disappearing in the first place, which quite often involves loss of natural habitat through the continued alteration of the environment.

In order to illustrate the significance of this trend, I wish to conclude by commenting upon some of the recent developments that are of major concern to the Belcher Island Inuit. At present, the Belcher Island Inuit, as with the other indigenous communities that depend upon the fish and wildlife in their particular territory, are all concerned with the real, and potential, ways in which the environment may be altered by large-scale industrial developments that are occurring, or planned for, this large inland sea and drainage basin.

More specifically, large-scale water diversion and hydro-electric schemes have taken place on both the east and west coasts of Hudson Bay. On the east coast, the water diversion scheme is under expansion to include the Great Whale River drainage basin. One of the concerns in response to these developments has to do with the manner in which altered inputs of freshwater decrease the density and increase the thermal stratification of the water column, which will decrease the overall biological productivity in the marine environment (Freeman, 1982: 962). A further alteration, however, stems from the increased incidence of methylmercury that accumulates in the environment following hydro-electric developments (Hecky, 1987). It should be recognized, however, that mercury is only one of several pollutants that are now entering and accumulating in the arctic marine environment, from distant industrial sources (Louis and Stonehouse, 1982). In one community that has been negatively affected upon by hydro-electric development on the west coast of Hudson Bay, it has been suggested that the proportion of wild foods in the Native diet decreased from 88 to 56 percent, following development of the project (Waldram, 1985).

Another concern stems from the proposed Grand Canal project, which involves the construction of a dike to separate James Bay from Hudson Bay. The object of the project is to convert James Bay into freshwater, and divert it south by constructing a canal for export to southern markets. Some of the preliminary ecological alterations that would occur to the marine environment in association with the project have been reviewed by Milko (1986).

A further concern stems from the search for, and exploration of gas and oil. Many of these concerns have already been detailed elsewhere (Freeman, 1985). In the Hudson Bay situation a considerable off-shore area has been leased for oil and gas exploration since the 1970,s (Crosby, 1978). In 1986, two exploratory wells were drilled in central

Hudson Bay. For the Belcher Island Inuit, these activities are also a major concern, particularly because if there was a spill the counter clockwise surface currents and prevailing north, northwest winds would likely direct it towards the Belcher Islands. If such an situation occurs, it is likely that much of the oil would accumulate in the Belcher Islands, as it washes up along the shoreline and becomes entrapped in the numerous bays, inlets, and other indentations along the coastline of this geographically complex archipelago.

My point in illustrating these recent developments is not to speculate on the potential biological consequences that may arise, but merely to only emphasize that any changes to the marine environment will likely result in changes to the human populations that inhabit this region. Thus, given the continued ways in which northern indigenous people depend upon the environment that sustains the wild foods they harvest, the focus of attention needs to include the management of the habitat; for, to protect only the animals while viewing humans as mere predators on the ecosystem is to deny, or ignore, not just the initial regimes promoting these developments in the first place, but also the fact that humans as part of the environment as well. In this sense, an animal protection policy of wildlife management only addresses the symptoms of our human ecological problems, rather than a systematic approach to sustainable development.

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